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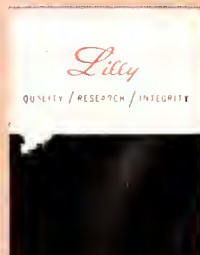
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VOLUME 18

JANUARY, 1957

NUMBER 1

The Significance of Weight Control in Pregnancy

JULIAN T. BRANTLEY, M.D.

GREENSBORO

For many years it has been the practice of most physicians who manage obstetrical patients to set a limit on the amount of weight these patients should gain during pregnancy. This attitude has resulted from the belief of many investigators that excessive gain in weight during this period is correlated with certain complications of pregnancy, especially with late toxemia. Although the advisability of weight control is more or less generally accepted, some investigators deny that total weight gain is related to the complications of pregnancy, and apparently have good statistical data to back up their opinion. The purpose of this paper is to review the literature and also to study a group of the author's private patients in relation to this subject.

Normal Weight Gain During Pregnancy

What is a normal weight gain during pregnancy? Three principal approaches to this question have been made:

1. The average weight change in normal pregnancies has been determined and accepted as normal. This is the most popular method.

2. The weight loss at delivery and in the puerperium has been determined. The assumption is that a woman having a normal gain in pregnancy will return after delivery to her pre-pregnancy weight.

3. The reproductive weight is estimated by adding the weight of the conception products and the increases in weight of the hypertrophied uterus, adnexa, and breasts, and to this total adding the increased blood volume and various estimates for physiologic edema, nitrogen storage, and other necessary changes.

The second and third methods usually

yield averages of about 5 pounds less than that reached by the first method. By the use of these various methods, estimates ranging from 12 to 25 pounds have been submitted.

In recent years average gains of 18 to 20 pounds have been commonly accepted as normal. Obviously, an arbitrary figure does not take into account the relation of the patient's usual weight to her ideal weight. Many physicians arrive at the ideal term weight by adding the normal gain to the ideal rather than to the usual weight. Many, however, ignore the ideal weight and determine the normal weight at term by adding the normal gain to the usual weight, even though the patient might be considerably underweight. If total gain is all important, then the latter would be the proper method.

Reasons for Controlling Weight

The usual reasons given to patients in advising weight control are: (1) the possibility of a long, hard, labor; (2) the possibility of toxemia; (3) the desirability of maintaining physical appearance after the gravid state has ended; (4) greater comfort during pregnancy; (5) greater ease in accomplishing normal activities. Certainly no one should take exception to the last three reasons, but the practice of telling patients that they are more likely to suffer from a long hard labor or have toxemia because of excessive caloric intake during pregnancy seems to be open to question.

In 1944 Chesley⁽¹⁾ made an exhaustive study of the literature on changes in weight and water balance in normal and toxic

pregnancy. He stated, in part:

In reviewing the literature, one finds that what is essentially a statistical problem has seldom been subjected to statistical operations, other than to determine the average weight changes in relation to the incidence of the complications under analysis. Furthermore, the data given are usually so few as to preclude any analysis by the reader. Curiously, the average gain is frequently calculated and then implicitly taken as the upper normal, thereby negating the normality of half the normal series from which the average was determined. Briefly, the total weight gain in pregnancy does not seem to be of much value in determining incipient toxemia. Many, perhaps most, patients who develop toxemia have had normal total weight gains. Relatively few patients with higher weight gains do become toxemic.

Nearly all investigators seem to agree that the rate of gain, especially during the third trimester, is far more significant than total gain. The majority also agree that rapid weight gain frequently precedes hypertension and other signs of toxemia, often by weeks. In other cases, however, the rapid gain coincides with the appearance of hypertension, and sometimes it does not occur at all. Dieckman⁽²⁾, in 1945, stated that statistics show an increased incidence of toxemia in those patients who gain more than 28 pounds, but that the total gain is less important than the rate of gain. Most investigators have failed to take a specific stand on excessive caloric intake during pregnancy as a precursor of complications, but simply refer to total gain, even though in some patients it is obvious that a fair part of the gain is due to edema⁽³⁾.

In 1946, however, Luikart⁽⁴⁾ published a paper dealing with the use of a high protein, low caloric diet for the prevention of toxemia of pregnancy. He reported a series of 1,000 patients subjected to a rigid diet. He did not specify what he considered a normal gain, but he said that a gain of more than 1 pound in two weeks called for drastic reduction in caloric intake. In this series, no toxemia developed, although he did not give his criteria for toxemia or any other data on these patients. The effectiveness of his paper is somewhat diminished, however, by the fact that these patients were selected. All patients who were organically unsound because of hypertension or diabetes, all those who were overweight at the beginning of pregnancy, and all those who

would not or could not cooperate were eliminated from this study. Results in the 399 patients who were eliminated were not given. Even though the study seemed somewhat incomplete, he made it clear that he considered strict caloric control to be essential in preventing toxemia.

From 1946 through 1954 the literature on this subject was scanty and nonilluminating⁽⁵⁾. In 1951 Douglas and Scadron⁽⁶⁾, reporting from Bellevue Hospital, took under consideration a somewhat different problem which is pertinent to this study. They reported on 521 obese women delivered on the Obstetric Service of Bellevue Hospital over a 10-year period. This study was confined to women weighing 200 pounds or more during pregnancy. Approximately 20 per cent showed hypertension at the beginning of pregnancy and 10 per cent manifested specific hypertensive disease of pregnancy. The severity of toxemia was not outlined, nor was the weight gain in these patients given. Contrary to previous reports, the authors did not find an increased incidence of prolonged labor or abnormal presentations. Fetal and maternal mortality were not increased, and there was an unusually low incidence of prematurity.

Statistical analysis of the literature as done by Chelsey would deny the relationship of weight gain to the complications of pregnancy, although there are dissenting voices. The scanty literature on this subject in recent years would suggest that most obstetricians are content to follow the earlier opinions that such a relationship does exist, and continue to warn their patients about the hazards of excessive gain. In the interest of intellectual honesty if for no other reason, we should seek to find the true answer to this question.

Materials and Methods

In order to determine the experience of one obstetrician with a group of private patients, a study of 368 pregnancies in 322 patients was instituted. The primary considerations were the relation of weight gain to toxemia and to difficult and long labors. Other aspects of weight control were also studied. These were consecutive cases, and the only criterion for selection was that the patients must have attained at least 36 weeks' gestation. In this series 50 deliveries were made in a group of 46

Negro patients. Except for a somewhat higher percentage of overweight patients initially, the Negro group did not differ from the white group. For this reason, they will not be treated separately.

These patients were managed under the following regimen: On the initial visit, each patient gave her usual weight before pregnancy. Her ideal weight was then determined from charts published by the Metropolitan Life Insurance Company. To this ideal weight was added 18 pounds to determine the ideal weight at term. If the patient's usual weight approximated or exceeded her ideal weight at term, she was advised to keep her gain as low as possible within the confines of adequate nutrition. No maximum limit was set for these overweight patients, but each was told of the advantages of weight control, with primary emphasis on the "cosmetic" and personal comfort features. Throughout pregnancy weight was discussed and advice given. This program was carried out more diligently with regard to patients who were obese or hypertensive at the beginning of pregnancy, but at no time were they threatened with the dire consequences of failure to control weight. Dietary advice was freely offered, but few patients were put on specific low calorie diets. In some patients who had unusual difficulty in controlling their appetites, amphetamine sulfate was used intermittently.

Each patient's chart was reviewed and the following determinations made:

1. Ideal weight, as determined from weight charts.
2. Usual weight, as given by the patient.
3. Weight at the first office visit.
4. Term weight, as recorded at the last office visit, which in each instance was made within one week of delivery.
5. Postpartum weight, as determined at the usual postpartum check-up. In no case was this figure recorded less than five weeks *post partum*.
6. Any complications of pregnancy, delivery or puerperium.

From the foregoing data the following determinations were made.

Results

Total weight gain during pregnancy

The average total gain for this group of 368 pregnancies was 22.5 pounds. In a

group of this size an average figure fails to give a clear picture. A much more significant picture showed the distribution of weight gain (table 1).

Table 1

Weight Gain During Pregnancy Pounds	Percent of Patients
0-5	1.0
5-10	2.0
10-15	10.6
15-20	19.6
20-25	29.2
25-30	22.1
30-35	10.0
35-40	3.9
over 40	1.6

Thus it is seen that 38 per cent of these patients gained 25 or more pounds during pregnancy. This would be considered excessive gain in most circles.

Weight before pregnancy

Does the usual weight before pregnancy influence the amount of gain during pregnancy? In other words, does the overweight patient tend to gain more or less than the underweight patient? For this consideration, a deviation of 10 pounds or more from the ideal weight was used to determine overweight and underweight, and the patients were divided into two groups: those gaining more than 25 pounds and those gaining less than 25 pounds.

Table 2
Relation of Normal Weight to Gain During Pregnancy

Total Gain (Pounds)	Patients Weighing 10 or More Lbs. Less Than Ideal Weight	Patients Weighing 10 or More Lbs. More Than Ideal Weight
	29 (60%)	56 (62%)
Less than 25	20 (40%)	34 (38%)
More than 25		
Totals	90	90

Table 3

Total Gain (Pounds)	Patients Weighing 5 or More Pounds Under Usual Weight	Patients Weighing 5 or More Pounds Over Usual Weight
	20 (12.3%)	34 (20.9%)
Less than 25 (103 patients)	2 (1.9%)	67 (63.8%)
More than 25 (105 patients)		

In this group there were almost twice as many overweight as underweight patients. The percentage in each group gaining more than 25 pounds may be compared with the entire group, of which 38 per cent gained more than 25 pounds. In this series at least, pre-pregnancy weight had no influence on total weight gain.

Postpartum weight

Using the same two groups, an analysis of the patient's postpartum weight in relation to the total weight gain was made. Postpartum weights were not available for all patients, either because of failure to return for postpartum examinations or failure to record the weight. In the group of 140 patients who gained more than 25 pounds, weights of 105 were available. Of the 228 who gained less than 25 pounds, postpartum weights were obtained for 163. A deviation of 5 pounds below or above the usual weight was used as the standard.

These findings are about what one would expect. Individual variations certainly occurred, since one third of the patients gaining more than 25 pounds returned to normal weight, and one fifth of those who gained less than 25 pounds were overweight, but the total data tend to confirm the prevalent idea that ideal gain is somewhat less than 25 pounds.

Relation of Total Gain to Complications of Pregnancy

So far, we have determined the weight gain in this group of 368 patients, the influence of usual weight on total gain, and the relationship between total gain and postpartum weight. Although these data are of interest, the primary purpose of this study is to determine the relationship between total weight gain and complications of pregnancy.

The complications usually correlated with excessive weight gain are toxemia of pregnancy and prolonged or difficult deliveries, or both. For purposes of investigation, patients with essential hypertension have also been analyzed. Of the cesarean sections performed, 2 were for preeclampsia, and the remainder for other indications.

The complications have been divided into groups:

Essential hypertension

There were 11 patients in this group, all of whom had blood pressures of 140 systolic, 90 diastolic or higher at the time of the first visit. The blood pressure remained elevated throughout pregnancy, but without significant increase. No signs of preeclampsia developed. Three of these patients had lower blood pressures at term than at the first visit. The average weight

gain was 21 pounds, with a range of 6 to 34 pounds. It is interesting to note that 6 of these 11 patients were from 25 to 65 pounds overweight prior to pregnancy. The other 5 were within 5 pounds of their ideal weight.

Toxemia

There were no cases of eclampsia in this series. All cases of toxemia were considered to be preeclampsia, without underlying essential hypertension. This group included all patients who showed a persistent elevation of blood pressure during the latter half of pregnancy to 140 systolic, 90 diastolic or more, with or without albumin and edema. Patients having preeclampsia with underlying essential hypertension showed significant increases of blood pressure, with or without albumin and edema. These cases were divided into three groups—mild, moderate, and severe.

Mild: There were 13 patients in this group. One had mild underlying essential hypertension. These patients showed blood pressure increases only, the maximum being 160 systolic, 100 diastolic. The average gain was 20 pounds, with 7 patients gaining 17 or less pounds. The maximum gain was 30 pounds. All these patients did well on conservative treatment.

Moderate: This group was comprised of 5 patients, all of whom showed some albumin and edema along with increases in blood pressure. The average gain for the group was 26 pounds, with a range of 17 to 34 pounds. Two had underlying hypertension and 3 were overweight before pregnancy. Of the 2 gaining 34 pounds each, both showed sharp weight increases during the last six weeks. One patient had a complete premature separation of the placenta and a stillborn infant. Otherwise, they all responded well to treatment and had uneventful deliveries.

Severe: Three patients comprised this group. Weight gains were 20, 24, and 26 pounds. One patient had severe underlying essential hypertension and one had a history of eclampsia with a previous pregnancy. Two had cesarean sections after failure to respond to conservative treatment. One of these collapsed and expired 12 hours post-operatively. Autopsy permission was refused, but the clinical impression was pul-

monary embolism. The other 2 patients did well and both had returned to their normal weights and blood pressures at the time of postpartum examination.

Complications of labor and delivery

Prolonged labor (true labor of more than 24 hours): Three patients comprised this group. Two patients gaining 33 and 41 pounds respectively had desultory labors with breech presentations. Deliveries were uneventful. The third patient gained 20 pounds. Labor was prolonged and terminated in a midforceps rotation and delivery.

Difficult deliveries: The 5 patients in this group all had difficult midforceps deliveries. The average weight gain was 22 pounds, with a range of 17 to 27 pounds. There were no fetal deaths or injuries.

This represents a review of all complications of pregnancy in a group of 368 deliveries that might possibly be related to excessive weight gain. It is interesting to note that of the 20 patients gaining 35 or more pounds, only one had an obstetric complication—namely, prolonged labor.

Summary

The literature on the subject of weight gain in pregnancy and its relation to obstetric complications has been reviewed, and the pertinent data have been presented. Three hundred sixty-eight pregnancies in 322 patients, have been reviewed and pertinent data presented:

1. The average weight gain for the group was 22.5 pounds, with 38 per cent of the patients gaining 25 pounds or more.

2. Overweight and underweight patients gained more than 25 pounds in the same percentage as the patients with normal pre-pregnancy weight.

3. Nearly two thirds of the patients gaining 25 pounds or more during pregnancy were 5 or more pounds over their usual weight at the time of the postpartum examination.

4. Total weight in relation to the complications of pregnancy were studied, and no definite relationships could be established. Of the 20 patients gaining 35 or more pounds, only one had a complication of pregnancy.

Conclusions

Chesley's thorough analysis of the literature indicates that there is no relationship between total weight gain and the complications of pregnancy. This study of 368 pregnancies would confirm that finding. It does indicate, however, that a fairly high percentage of the patients will gain excessively during pregnancy and retain some of this weight, even though weight control is emphasized. We might presume that given a free rein, they would gain even more.

In this small series, obesity was associated with essential hypertension, but not with an increased incidence of preeclampsia.

The study failed to show a definite correlation between excessive gain and the complications of pregnancy, with the exception of toxemia, but this group was too small to be conclusive. That only 1 of the 20 patients gaining more than 35 pounds had a complication would suggest that no correlation exists.

This study would indicate that there is no real justification for emphasizing weight control as a means of preventing complications. It is most important, however, if we are to prevent obesity and have patients experience more comfortable pregnancies. The physician should emphasize weight reduction for obese patients. By the same token, he should attempt to prevent obesity in patients with an abnormal appetite during pregnancy. Control of weight and appetite during pregnancy usually restores the patient to her pre-pregnancy state. Failure of control may start her on the road to obesity and its associated ills.

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The Role of the Anesthesiologist in Modern Medicine

D. LEROY CRANDELL, M.D.

and

W. G. PAGE, M. D.

WINSTON-SALEM

Since the days of John Snow, the first full time physician anesthetist, great strides have been made in medicine and anesthesia. Early in the development of anesthesia the anesthesiologist was concerned only with rendering a patient insensible to pain for a surgical procedure. Ensuing years brought great advances in the knowledge of the underlying pathology and physiology of disease processes. From this knowledge, associated with great advances in pharmacology, the modern concept of anesthesiology developed, so that now the anesthesiologist must not only be a master at anesthetic techniques but also a clinical pharmacophysiologist.

In addition to his role as a partner on the surgical and obstetric teams, his understanding of the mechanisms of pain, and of respiratory and circulatory disturbances brings him into consultation regarding the treatment of patients outside the operating and delivery rooms.

The purpose of this paper is to clarify this newer, unfamiliar role of the anesthesiologist, which is often overlooked and therefore often not utilized.

Preoperative Evaluation

Anesthetic management begins with the preoperative evaluation of the patient. The selection of premedicaments and anesthetic agents and techniques must be individualized to conform with fundamental pharmacologic and physiologic principles. In some areas, owing to custom and a lack of available anesthesiologists, the preoperative evaluation and medication have been undertaken by others. In a vast majority of instances the surgeon follows a routine predicated on past experience and generalities rather than on the specific patient at hand. This has encouraged the standardized

selection of premedicaments and anesthetic agents and techniques. There is a tendency to employ the same anesthetic management for a specific surgical procedure with little regard to individual variations, indications, or contraindications. Such a course was satisfactory when the patient's physical status was excellent. In the patient with co-existing pathologic conditions, proper evaluation and choice of premedication can materially reduce morbidity and mortality. Problems of increasing complexity today demand greater skill on the part of both surgeon and anesthesiologist. Many patients now expect, and can be given, the benefits of surgery formerly denied them because of coexisting pathologic states such as severe cardiac, liver, or renal disease. The continued employment of simple, standardized anesthetic procedures in the newer, complicated surgical techniques is an archaic practice, running counter to the progress of modern medicine.

The internist can evaluate the patient's physical condition and, if necessary, improve it to its maximum. However, neither surgeon nor internist can be fully aware of the diverse pharmacologic responses and physiologic alterations encountered in the anesthetized patient, nor of the effect imposed on associated pathologic conditions by various anesthetic agents and techniques.

The anesthesiologist commands a variety of agents and techniques with which to modify his approach to the same patient, depending on the specific conditions encountered in the operating room.

The usual dose of a narcotic utilized by the patient on the ward for the control of pain may well be sufficient, when combined with an anesthetic, to produce severe cardiovascular depression; hence the value of the anesthesiologist's preoperative assay of the patient and his ordering of the premedication which will later be added to by anesthetic drugs to arrive at a stable, physiological anesthetic.

Read before the Section on Anesthesia, Medical Society of the State of North Carolina, Pinehurst, May 2, 1956.

From the Department of Anesthesiology, Bowman Gray School of Medicine of Wake Forest College and the North Carolina Baptist Hospital, Winston-Salem.

If an anesthesiologist is available, the selection of premedicaments and the anesthetic agent and techniques should be left to his judgment. If an anesthesiologist is not available, it is better that the nurse-anesthetist or part-time physician-anesthetist administer an agent which he or she is familiar with than that the surgeon or internist demand the use of a theoretically superior agent or technique with which the anesthetist is not familiar.

No patient comes to the operating room merely to have an anesthetic; he comes to be treated for some pathologic condition. Therefore, the efforts of the surgeon, internist and other specialists should be combined with those of the anesthesiologist to make the surgical procedure as safe as possible.

Immediate Postoperative Care

The recent innovation of the recovery room has proved to be the most efficient and economical means of caring for the postoperative patient. The period immediately following anesthesia is a crucial one, and the patient is greatly benefited by the presence of an experienced anesthesiologist. Certain respiratory and circulatory complications may and often do occur in the immediate postoperative period, and can best be diagnosed by the anesthesiologist who has followed the patient's course throughout the operation. He can then institute the proper corrective measures before serious complications occur.

The anesthesiologist's familiarity with the management of pain is of great assistance in the treatment of emergence delirium and immediate postoperative pain. The intravenous administration of small doses of morphine (5 mg.) and Demerol (50 mg.), a route too infrequently utilized, acts more effectively and rapidly, and causes less circulatory and respiratory depression than do larger doses given subcutaneously. Too often, however, restlessness and delirium are manifestations of hypoxia, for which the depressant action of narcotics is definitely contraindicated.

Other methods such as regional nerve blocks or the intravenous injection of alcohol and procaine may be a wiser method of alleviating pain than is the use of narcotics in some patients.

The Comatose Patient

The management of the comatose patient is a frequent problem in medical practice. The etiologic factors may be drug poisoning (such as narcotics, barbiturates, and alcohol), cerebral trauma, cerebrovascular accidents, or the inhalation of gases such as carbon monoxide, diabetic acidosis, hypoglycemia, uremia, heat exhaustion, drowning, and electrocution. Whatever the etiology, certain preliminary therapeutic prerequisites must be established before definitive treatment or diagnostic procedures are undertaken. The most important of these prerequisites is the establishment of a clear airway and adequate alveolar ventilation to obviate the deleterious effects of hypoxia and hypercarbia. The reestablishment of adequate alveolar ventilation cannot be overemphasized, since its inadequacy will often prove disastrous to the comatose patient.

It is unreasonable to assume that adequate alveolar ventilation can be maintained merely by placing the comatose patient in an oxygen tent or by administering oxygen via a nasal catheter or mask. A high atmospheric concentration of oxygen will be useless if the tidal volume is depressed or if the airway is obstructed. All too frequently, too much reliance is placed on skin color as an indication of alveolar ventilation. This is hazardous, since both hypoxia and hypercarbia may be present in the absence of cyanosis. In addition to an unobstructed airway and a proper concentration of oxygen, the adequacy of alveolar ventilation may necessitate intermittent, inspiratory positive pressure to insure the proper elimination of carbon dioxide.

Coma due to overdosage of barbiturates and narcotics or to the inhalation of carbon monoxide deserves special consideration. In barbiturate poisoning, the establishment and maintenance of adequate alveolar ventilation is by far the most important aspect of the treatment until the drug is detoxified by the liver and/or eliminated by the kidney. Recovery is impossible if hypoxia and carbon dioxide retention are allowed to produce irreversible damage. The maintenance of adequate alveolar ventilation may require intermittent positive pressure breathing with oxygen through an endotracheal tube. In addition to the alleviation of

tidal hypoxia, stagnant hypoxia must be corrected by maintaining the peripheral circulation with vasopressor drips.

Undue emphasis has often been placed on the so-called analeptic drugs such as Picrotoxin, Metrazol, caffeine, benzedrine and Coramine in the treatment of barbiturate poisoning. Then too, physicians are often under the misconception that all one needs to do is to administer "the antidote." These drugs neither accelerate detoxification of the barbiturates by the liver nor facilitate their elimination by the kidney. They do increase cerebral metabolism and oxygen demand at a time when the cerebral cells are already in a hypoxic state. This is analogous to whipping a tired horse. Also, their injudicious use may precipitate convulsions which additional doses of barbiturates are required.

Recovery from barbiturate poisoning would be greatly facilitated if more emphasis were placed on the immediate establishment and maintenance of adequate alveolar ventilation and supportive therapy, and less on the use of analeptic drugs. The recent introduction of the Reiter machine in the treatment of barbiturate poisoning by the production of cerebral stimulation is against sound pharmacologic and physiological principles, and its popularity seems unwarranted⁽¹⁾.

In the treatment of coma due to overdosage of narcotics the specific narcotic antagonist, N-allylnormorphine (Nalline) or levallorphan tartrate may be effectively utilized. These drugs have successfully counteracted the respiratory depression due to morphine, Demerol, Pantopon, Dilaudid, Methadone, Metopon and Dromoran. Again, however, their use should be secondary to the immediate establishment and maintenance of adequate alveolar ventilation.

In carbon monoxide poisoning the maintenance of adequate alveolar ventilation by the use of intermittent, positive pressure breathing with oxygen is also of prime importance. The administration of carbon dioxide-oxygen mixtures in an attempt to enhance the dissociation of carboxyhemoglobin does not seem warranted, since clinical experience has shown that it does not greatly facilitate the recovery from carbon monoxide poisoning.

If it is felt that the maintenance of ade-

quate alveolar ventilation in the comatose patient has been overemphasized, justification is taken in the fact that asphyxia is the cause of death in the majority of these patients.

Pain

It is difficult to think of a pathologic condition that is not associated with some degree of discomfort or pain. Pain, with all its complexities, is a problem which the physician encounters daily in his medical practice. Its control gives rise to more problems now than formerly, for more people are being temporarily retrieved from death and are enduring longer, more drawn out terminations of their disease processes.

Someone must deal with these problems of pain after they have exceeded the limits of medicinal relief, and when a conservative approach, free from the adverse, accessory disabilities encountered in the more permanent surgical approach, is desired. The anesthesiologist, armed with his knowledge and skill in the application of nerve blocks for the management of pain, is best equipped to enter the picture at this point.

Pain has two components: (1) the psychologic reaction which varies from individual to individual and even in the same person from time to time; (2) the physical perception of pain, which also varies with the individual and with the disease present, and which is modified by the first factor. Situations in which the perception of pain is dissociated from the reaction to pain are also commonly encountered.

Pain may be acute or chronic. Our experience and that of others⁽²⁾ has been that acute pain is more amenable to treatment than is the prolonged or chronic type. No matter how much or how long the patient has been treated, the first prerequisite for successful management is a complete history and physical examination to determine the etiologic mechanism and neural pathways involved. Anyone who is experienced in dealing with the problems of pain can cite cases in which previous medical treatment of the pain was misdirected and a simple procedure based on a thorough history and physical examination resulted in complete relief. The history and physical examination also allow the examiner to become acquainted with the patient, to eval-

uate his tolerance to pain, and to form an opinion as to the psychic potentiation present. Once the neural pathways—whether of the autonomic or the somatic nervous system—have been accurately identified, an appropriate nerve block may be performed. Frequently pain cycles are broken by the nerve blocks, effecting complete relief. If the stimuli are persistent, as in malignant disease, the interruption of the neural pathways with alcohol will have a more lasting effect.

It must never be forgotten that confidence, conviction, and belief in the physician, combined with the physician's own enthusiastic yet sympathetic approach, are of prime importance in determining the effectiveness of any method of pain management.

Inhalational Therapy

Inhalational therapy is an indispensable adjunct to modern medical therapeutics. Satisfactory results with this technique require a knowledge of the disturbances in respiratory function and of the specific mode of therapy indicated. The anesthesiologist, with his understanding of respiratory physiology and inhalation therapeutic techniques, is well equipped for its proper application.

Inhalational therapy has four primary objectives which vary according to the altered respiratory function which is to be corrected: (1) to increase the atmospheric oxygen concentration; (2) to reduce the effort of respiration and aid the passage of oxygen to the alveoli; (3) to alter intrapulmonary pressure, and (4) to administer drugs by inhalation.

Oxygen

The most significant indication for inhalational therapy is hypoxia. Hypoxia, whether due to a reduction of the partial pressure of oxygen in the inhaled atmosphere, interference with the diffusion of oxygen through the alveolar capillary membrane, or a reduction in tidal volume due to disease or drugs, is most amenable to oxygen therapy. Hemoglobic hypoxia resulting from hemorrhage or carbon monoxide poisoning, stagnant hypoxia due to cardiac or peripheral circulatory failure, and demand hypoxia as a result of increased metabolism are benefited by increasing the

saturation of the plasma with oxygen. In histotoxic hypoxia, resulting from the inability of the tissues to utilize oxygen, oxygen therapy is of no real benefit.

The administration of high atmospheric oxygen concentrations can be deleterious in certain instances. Although hypoxia often exists in the presence of pulmonary emphysema and fibrosis, high oxygen concentrations should be avoided for fear of producing reflex depression of the respiratory center and cerebral cortex leading to carbon dioxide narcosis and coma. Also, in the premature infant a relationship between high oxygen concentrations and blindness due to retrolental fibroplasia seems established.

Helium-oxygen mixtures

Far too frequently the use of helium-oxygen mixtures in the treatment of obstructive dyspnea has been uneconomical and unbeneficial to the patient. Theoretically a helium-oxygen mixture, because of its decreased density, will pass through an obstructed lumen with greater facility and in greater volume than will air or a high oxygen mixture. This is undoubtedly true in localized obstructions, but in linear obstructions as in asthma improvement in the passage of the gas mixture is unlikely. The ideal method of administering helium-oxygen mixtures is a tight fitting face mask associated with intermittent, positive inspiratory pressure. Other methods are not only costly but are often of little benefit to the patient. Because of its slow rate of diffusion from an isolated alveolus, the use of helium-oxygen mixtures to fill the peripheral alveoli as a prophylactic measure against postoperative atelectasis is based on a sound physiologic principle. However, the diffusion of nitrogen from an isolated alveolus is equally as slow as helium. Thus the use of air should be beneficial as a helium-oxygen mixture in the prevention of postoperative atelectasis, and is less costly to the patient.

Carbon dioxide

Carbon dioxide has no place as an inhalational therapeutic agent. In their zealous attempt to produce respiratory stimulation or cerebral vasodilatation its proponents often lose sight of its frequent deleterious effects on the respiratory, card-

iovascular, and central nervous systems. Intractable hiccoughs commonly occur in patients whose general condition is such that carbon dioxide inhalation may be harmful. In the patient requiring respiratory resuscitation, a state of hypercarbia and respiratory acidosis already exists. The administration of additional carbon dioxide for the purposes of respiratory stimulation is adding insult to injury. In the treatment and prevention of postoperative atelectasis by respiratory stimulation with carbon dioxide-oxygen mixtures, the resultant hypoventilation is followed by a period of hypoventilation. This period of hypoventilation may encourage further atelectatic formation, for carbon dioxide and oxygen are highly absorbable. The anesthesiologist is constantly aware of the hazards of carbon dioxide inhalation and constantly endeavors to protect his patients from it.

Denitrogenation

The process of denitrogenation is an important inhalation therapeutic technique. It is accomplished by the inhalation of nitrogen-free mixtures in order to increase the pressure gradient of nitrogen from the tissue spaces and body cavities and thus increase its rate of diffusion into the blood and its elimination from the body via the lungs. This utilization of the gas laws is especially useful in the treatment of intestinal distension, subcutaneous emphysema, post-air encephalography headache, aero-embolism, and aero-otitis media.

Intermittent positive pressure breathing

Intermittent positive pressure breathing is a valuable adjunct to inhalational therapy. It is of special value in the presence of hypoventilation, in assuring the proper elimination of carbon dioxide as well as good oxygenation. Hypoventilation is often associated with emphysema, poliomyelitis, high spinal anesthesia, and depression due to drugs.

The use of intermittent positive pressure breathing with oxygen in the treatment of pulmonary edema deserves special mention. Ignorance concerning the pathologic-physiology of pulmonary edema has restricted its use in this condition. Pulmonary edema may be produced by hypoxia and a sustained increase in pulmonary capillary pressure. Hypoxia results in an increased capillary permeability and an increased flow

of lymph. Obstructive lesions in the tracheobronchial tree produce a marked increase in the negative intrapulmonary pressure during inspiration, exerting a suction effect on the pulmonary vascular bed. Intermittent positive pressure breathing with oxygen counteracts the increased negative intrapulmonary pressure, antagonizing the increased pulmonary capillary pressure, abolishing hypoxia, and relieving pulmonary vascular stasis.

Another important adjunct to inhalation therapy is aerosolization with antibiotics, bronchodilators such as Isuprel, bronchovasoconstrictors such as Neo-Synephrine and mucolytic agents such as Alevaire.

Peripheral Vascular Disease

With the increased mechanization of present day living and the extension of the life span, more alterations in the function of the peripheral vascular system are being seen.

In the modern approach to peripheral vascular disease, the anesthesiologist is frequently called on to contribute to one of three aspects of vascular changes—that is, (1) diagnosis, (2) prognosis, or (3) therapy.

Utilizing, for best results, the constant-temperature room and a constantly recording thermometer, alterations in blood flow to the extremities, due either to generalized obstruction of the arteries and arterioles or to spasm of the vessels, may be differentiated quite well by sympathetic block of the extremity. For the upper extremity, the stellate ganglion and the second, third, and fourth thoracic sympathetic ganglia on the corresponding side must be blocked. Realizing that the production of Horner's syndrome means only that the sympathetic supply to the head has been interrupted and not necessarily that to the arm, the results may be checked by utilizing the sympathogalvanic reflex⁽³⁾. This simple test is further utilized to check the result of sympathetic blockade in the lower extremity. For the lower extremity sympathetic blockade of the first, second, and third lumbar ganglia is accomplished via a paravertebral approach.

The patient with a cold extremity who is a candidate for a sympathectomy may be benefited by an appropriate sympathetic

block to indicate the increase in blood flow that may be expected from surgery or the futility of subjecting the patient to an operation.

Therapeutically, the anesthesiologist may aid in numerous situations. Most of the conditions dealt with are those due to spasm of vessels resulting from various causes—for example, acute thrombophlebitis, Raynaud's disease, accidental trauma (such as crush injuries, cold, and refrigerant gasses), surgical trauma (such as that associated with the repair of injured vessels or the newer graft procedures for arterial obstruction), and postembolic spasm.

The functional changes of the inflamed or traumatized vascular system with associated spasm obstruct the blood flow and increase small vessel pressure locally. It is important to remember that the degree of change occurring will be inversely proportional to the amount of collateral circulation that develops or is available. If the original lesion is obstruction, spasm soon follows, resulting in increased capillary permeability and edema, and thus forming a vicious self-potentiating cycle. The important link in this cycle is spasm. When this is broken by sympathetic blockade, the whole cycle falls apart. Elevation of the extremity for gravity drainage then becomes a really effective tool. Pain, due to ischemia, is abolished by the resultant improvement in circulation.

Reflex sympathetic dystrophy resulting from many factors⁽⁴⁾ may be aided by sympathetic block. Here, again, the anesthesiologist aids his medical colleagues by utilizing specialized techniques with which he is familiar through his daily association with physiology, pharmacology, and nerve blocking procedures.

Electroshock Therapy

The introduction of convulsive drug therapy in 1934 brought a group of associated problems, such as fear of repeated treatments, fractures, dislocations, and hypoxia, which were not solved until recently. The subsequent change to electrical stimulation produced more effective treatment, but the problems and complications continued. Various agents such as spinal anesthesia and long-acting muscle relaxants (curare, gallamine and decamethonium) were used in an effort to circumvent and prevent fractures.

When given in doses large enough to provide relaxation, however, they created the problem of maintaining respiration for an extended period after the conclusion of the shock treatment. Small doses, on the other hand, failed to produce the desired relaxation. Now, with the use of a short-acting relaxant such as succinylcholine chloride and an amnesic dose of barbiturate, the procedure has become almost void of complications. The anesthesiologist may now induce amnesia with an ultrashort-acting thio-barbiturate (thiopental or thiamylal) utilizing an average dose of 200 mg., then superimpose the short-acting muscle relaxant in a dose ranging from 10 to 40 mg. After the muscular fasciculations have ceased, the psychiatrist can apply the electric shock. The anesthesiologist further maintains the airway and adequate pulmonary ventilation should the airway become obstructed or the action of the succinylcholine be unduly prolonged. The incidence of fractures, dislocations, and other complications has been reduced to a negligible point.

Severe Systemic Tetanus

The primary objective in the management of severe systemic tetanus is to maintain normal respiratory physiology until such time as specific antitoxin and antibiotic therapy is effective. This necessitates controlling the severe episodes of tonic contractions, which involve all the respiratory muscles, leading to death by asphyxia and exhaustion. Such control may be accomplished by the administration of massive doses of paraldehyde, Avertin, chloral hydrate, opiates, bromides, or barbiturates. The use of massive doses of these central nervous system depressants is not only unphysiologic but detrimental. The physiologic approach encompasses five principles:

1. Early routine tracheotomy to reduce dead space and to facilitate the removal of tracheobronchial secretions
2. The effective release of muscular spasm with intravenous myoneural blocking agents
3. The administration of high atmospheric oxygen concentrations
4. The maintenance of adequate alveolar ventilation with a respirator
5. The use of sedative doses of barbiturate drugs.

This regimen necessitates experience in

the management of respiratory emergencies, the use of myoneural blocking agents, and the operation of respirators which the anesthesiologist is well equipped to provide.

Summary

The purpose of this paper is to acquaint the physician with the newer and varied aspects of anesthesiology. Since anesthesiology is a relatively new specialty, these unfamiliar aspects are too often overlooked and therefore too infrequently utilized. Teamwork with other medical specialties is

important in providing better medical care for the patient.

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Gastric Dilatation and Hemorrhage in Acute Infectious Diseases of Infancy and Childhood

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The purpose of this paper is to point out and discuss the complications of acute gastric dilatation and gastric hemorrhage in the course of an infectious illness in infants and young children. The attending physician may feel that the primary illness accounts for the critical state of the child, whereas the gastric dilatation, the hemorrhage, or both may actually be the shocking factors. Both complications, which in themselves indicate a bad prognosis, can be treated if recognized. Three cases will be presented to illustrate the problems involved.

Gastric Dilatation

The *Mitchell-Nelson Textbook of Pediatrics* states that dilatation of the stomach may occur during the acute stages of pneumonia and other severe infections. It states further that generalized infections and toxemias may also be responsible for gastric hemorrhage in infancy and childhood⁽¹⁾.

Etiology

The cause of acute dilatation of the stomach has been extensively studied, primarily by surgeons, because of the frequency with which it follows operative procedures⁽²⁾. Klemptner⁽³⁾ divides all cases of acute dilatation of the stomach into two groups: (1) acute operative dilatation, and (2) acute secretory dilatation. About 30 to 40 per cent of the cases fall into this second group⁽⁴⁾. According to Klemptner, two

factors are essential to the production of acute secretory dilatation of the stomach: reverse peristalsis and suppression of the act of vomiting.

The contents of the intestinal tract move from the stomach to the rectum because of the arrangement of graded forces along the wall of the intestinal tract (theory of intestinal gradients of Alvarez⁽⁵⁾). The walls of the upper tract possess a higher tonicity, rhythmicity, and metabolic rate in comparison with those of the lower tract. If any one of these three factors is disturbed, as by illness, the intestinal gradient may become flattened or reversed. When this occurs, the progress of the intestinal contents is no longer caudad. It may be anticipated that illness and toxemia will affect the area of greatest intestinal activity oftener than they do that of lowest activity. The actual mechanism by which the decrease of gastric activity and the resulting atony is produced is neurologic—either a reflex inhibition of the vagus, or stimulation of the splanchnic nerves^(2b,c). The stomach ceases to be the part of the gastrointestinal tract with the greatest propelling force, and its contents are not emptied into the lower tract. Reverse peristaltic waves may occur, causing first nausea and then vomiting of the stomach and intestinal contents.

If the stomach cannot empty itself—owing to the suppression of the act of

vomiting because of weakness, pain, drugs, and so forth—the secretions brought to it will accumulate, causing it to become increasingly dilated and atonic. As it becomes completely atonic, a negative pressure develops and antiperistaltic waves empty all the lower intestinal contents and secretions into the stomach. At this stage there is no true vomiting, and such vomiting as occurs is an overflow process in which mouthfuls of fluid seem to pour out.

When acute dilatation of the stomach is viewed as a reversal of the intestinal gradient, a paralytic ileus is another picture of the same process in which the intestinal gradient is flattened, with the point of least pressure lower in the intestinal tract⁽⁶⁾.

Incidence

It is impossible to determine the frequency of acute dilatation of the stomach as a complication of other illnesses in childhood. Edwards and Bowie reported 13 cases at the University of Maryland Hospital over a five-year period, and of these only 2 were in children 10 years of age or younger, and only 1 of these occurred on the pediatric service⁽⁷⁾. Kelsey, of North Carolina Baptist Hospital, reported a case of acute dilatation of the stomach that occurred in a 13 year old boy as a complication of dermatomyositis⁽⁸⁾.

Hemorrhage

Gastric hemorrhage was early associated with pneumococcic pneumonia, in which the pathologic specimen showed an ulcerative gastritis from which pneumococci could be cultured⁽⁹⁾, but there are no reports of this complication since the advent of antibiotic therapy of pneumonia.

Etiology

A weakened capillary wall will allow loss of blood into the stomach. The damage to the capillary wall may be brought in one of two ways: by direct necrotic action of bacterial emboli, or by weakening and breaking of the endothelial lining of the capillary due to the action of the toxins produced by the bacteria⁽¹⁰⁾. Among 10,355 consecutive autopsies at the Cook County Hospital (all ages included), 355 (or 3.4 per cent) showed evidence of abnormal bleeding. In 50 per cent of these cases, the primary disease was an infection such as bacterial

endocarditis, meningitis, septicemia, pneumonia, pyonephrosis, or tuberculosis⁽¹⁰⁾. Reinhart reported a case of massive intestinal hemorrhage complicating pneumonia and upper respiratory infection in which the pathologic specimen showed multiple petechial hemorrhages of the stomach and small intestines. He felt these were caused by the capillary damage of the associated toxemia⁽¹¹⁾.

In acute gastric dilatation, another factor enters into the pathologic picture of the gastric hemorrhage. Mallory suggests that it is possible to distend an abdominal viscus so much that the blood supply is temporarily and completely blocked and necrosis of the gastric mucosa is initiated. From these points of necrosis multiple acute ulcers are formed and may cause bleeding if the blood supply is restored⁽¹²⁾.

Incidence

Gastric hemorrhage in the course of acute infectious diseases is not reported frequently. Ortiz and others⁽¹³⁾ reported a total of 226 cases of gastrointestinal bleeding during a four-year period at Northwestern University Medical School. None was associated with generalized infections, although pharyngitis was listed as the cause of 1 case of oral bleeding. Hodgson and Kennedy⁽¹⁴⁾ of Mayo Clinic have discussed 246 cases of gastrointestinal bleeding in infants and children, in which meningitis caused bleeding in 2, both under the age of 2 years. Brayton and Norris⁽¹⁵⁾, at Los Angeles Children's Hospital, reported 428 cases of gastrointestinal bleeding in children covering a 15 year period. Of these, only 1, listed as an acute gastritis during the course of a severe case of bronchopneumonia, was associated with an acute infectious disease.

The surprising fact is not that we see gastric dilatation and hemorrhage in the course of infections, but that we see either so seldom. Three case reports follow:

Case Reports

Case 1

A 2 year, 8 month old boy was admitted to the hospital because of coughing, shortness of breath, and vomiting. The child had had a cold and fever two days prior to admission and despite treatment with an injection of penicillin the previous day had continued to become worse. He had had asthma during his first year,

On admission the child was extremely ill, dyspneic, and vomiting. Physical examination showed bilaterally injected ear drums, 3 plus enlarged injected tonsils, and widespread crepitant inspiratory and expiratory rales in both lung fields. The heart was rapid, but without murmurs. The abdomen showed no distention, masses, or tenderness. He was moderately dehydrated.

The temperature was 101 F. rectally. The complete blood count was as follows: hemoglobin 10 Gm. (67 per cent), red cell count 4,800,000, white blood cell count 8,500, with a differential of 60 segmented cells, 2 stab cells, and 38 lymphocytes. The radiologist reported: "Soft limited infiltrative changes are noted in the central portions of either side of the chest, with generalized accentuation of lung markings; findings suggest a virus type of bronchopneumonia. The peripheral portions of the lungs are clear, and no evidence of pleurisy is noted. The heart occupies a mid-line position, but appears very small, as one might expect with an acute asthmatic attack." Treatment consisted of penicillin, aminophylline, Benadryl, pentobarbital, and fluids.

The patient was restless the afternoon of the second hospital day, and although he had not vomited through the night, vomited milk at 2 p.m., and clear fluid at 3:30 p.m. At 8:30 he began to vomit material resembling dark coffee grounds. Examination at that time showed him to be comatose, constantly spitting mouthfuls of dark "coffee-ground" vomitus. The abdomen was distended. The stomach was decompressed with a Levin tube, and oxygen, blood and fluids were given. Penicillin was stopped and Aureomycin given rectally. The blood transfusion was repeated the next day and fluids were continued. The Levin tube returned dark blood immediately, and for the next 48 hours. The tube was removed at 72 hours. The chest gradually improved and had cleared by the eighth hospital day. The patient was dismissed on the ninth hospital day, and is well three years later.

Case 2

A 2 month old boy was admitted to the hospital with a history of chickenpox of 6 days' duration, irritability, and vomiting for 18 hours.

He was the fourth child. The pregnancy had been complicated by bleeding and by delivery at about 7 months' gestation. His birth weight was 4 pounds, 13 ounces, and his neonatal course was uneventful except for anemia (the hemoglobin was recorded as 9 Gm. two weeks before admission). The siblings had had varicella, and the patient had begun to have vesicles six days previously. His progress had been satisfactory until 18 hours prior to admission, when he began to vomit food and liquids. He became increasingly listless, and the vomitus became dark-colored and more frequent during the 12 hours before admission.

On admission he was critically ill, responded only to painful stimuli, and had excoriated vesicles over

the face, scalp, neck, shoulders, and to a lesser extent over the body. These were noted to drain clear to bloody fluid. No skin purpura was noted. The lungs were clear, the heart was rapid. The abdomen was distended, with the stomach visibly enlarged, extending over the upper half of the left side of the abdomen and across to the right. The child was continuously spitting up coffee-ground vomitus.

The temperature was 99 F., rectally. The complete blood count showed the hemoglobin to be 9.2 Gm. (61 per cent), red cell count 3,800,000, white cell count 18,500, with a differential of 46 segmented cells, 11 bands, 38 lymphocytes, 3 monocytes, and 2 eosinophils.

The treatment consisted of decompression with the Levin tube, oxygen, two blood transfusions, Vitamin K, and Adrenosem. Gentian violet and zinc oxide were applied locally to the skin lesions. The Levin tube returned dark blood immediately, then bright blood for 36 hours. The tube was removed at 72 hours, and the child dismissed on the eighth hospital day. He is well two years later.

Case 3

A 7 month old girl, the second of two children, was admitted to the hospital because of high fever. She had been ill since the previous day with a cold. She had been seen eight hours before admission by her family physician, with a temperature of 105 axillary. She was given 600,000 units of penicillin intramuscularly at that time. She was seen again immediately prior to admission with a temperature "too high to read."

On hospital admission the child was cynotic, and had widespread petechial hemorrhages over her body. She was unconscious and did not respond to any stimuli. Rhonchi were heard with her gasping respirations. Heart sounds were distant, rapid, and of poor quality. The abdomen was soft but distended.

The temperature was 109 F., rectally. On complete blood count there were 5,030,000 red blood cells with a hemoglobin of 14.3 Gm. (95 per cent), 10,900 white blood cells, and a differential count of 34 segmented cells, 64 lymphocytes, 2 basophils. The x-ray report was as follows: "Rather soft pneumonic changes are present in the left portion of the chest, having a perihilar distribution. Moderate accentuation of lung markings in both lung fields, with the findings those of a beginning pneumonia, very possibly virus in type. At present there is no frank consolidation or sign of gross obstruction, tumor, or pleurisy with effusion. The heart shadow is not enlarged or deformed, and occupies a mid-line position. There is considerable air in the stomach and also moderate inflation of the colon, probably secondary to this patient's infectious process.

Treatment consisted of oxygen, cold sponges and enemas, ice packs, fluids, plasma, Cedilanid, caffeine IV, and Adrenosem given intramuscularly. The Levin tube returns continued to be bright red

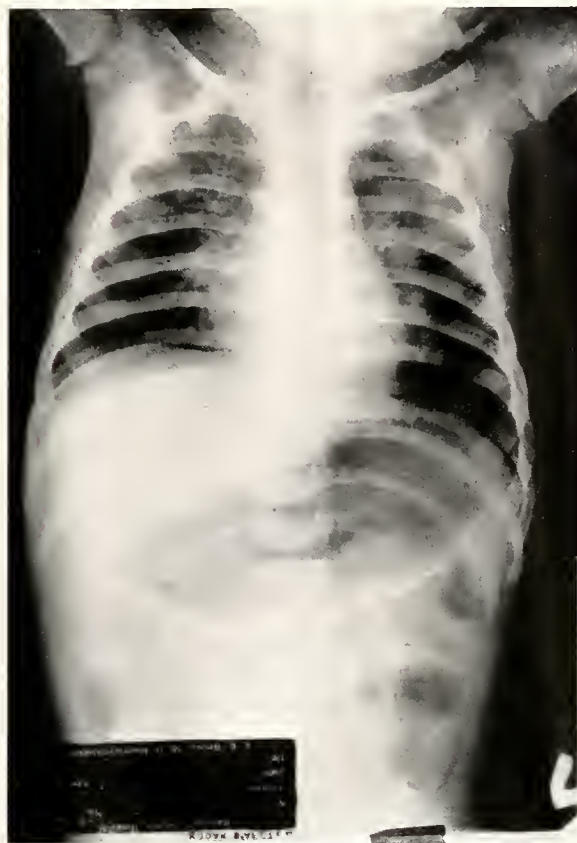


Fig. 1. Case 3.

to the child's death. The temperature decreased to 102.4, but her condition did not improve and she died at the eighth hour of her hospital stay. Autopsy showed: Bronchopneumonia, petechial hemorrhages of the gastric mucosa, and one area of submucosal hemorrhage in the gastric wall without ulceration.

Comment

In case 1 no note was made of the size of the stomach, although the abdomen was distended. The type of vomiting and the constant mouthfuls of bloody vomitus certainly suggest the overflow effect of the atonic stomach.

Varicella was not associated with gastric hemorrhage in the 2,534 cases studied by Bullowa and Wishik⁽¹⁶⁾, although they did report 3 cases of intestinal intoxication, with one death. This term is not used now, but probably could designate intestinal ileus. The association of purpura with varicella has been reported⁽¹⁷⁾, but unlike this case, most are evidenced by cutaneous bleeding, and, with the exception of the

case presented by Cohen^(17a) which was marked by bleeding from the mouth, none had internal bleeding.

Unfortunately, no platelet counts were done in any of these 3 patients. External purpura was not present in any of the children, and my clinical impression at the time of the venipunctures was that none showed a tendency to bleed at any time. It is impossible, however, to eliminate temporary thrombopenia, which, when it occurs, is most commonly known to follow upper respiratory diseases⁽¹⁸⁾ and very rarely varicella^(17b).

No prothrombin studies were done on these three patients. Since vitamin K is not stored in the body to any extent, sufficient amounts must be provided in the diet in order to maintain a normal blood prothrombin level^(1,19). These children had been ill for at least two days, during which they had not eaten. It is possible that hypoprothrombinemia could have developed in this interval.

Nor were any electrolyte studies made. Of particular interest would have been the serum potassium determination of these children. Pickering points out that hypokalemia may be manifested by silent distention of the abdomen, dyspnea, and cardiac signs, including cardiac failure, which was marked in the third case presented here. Pickering also states that potassium depletion may be caused by inadequate intake of potassium and/or excessive output under the stress of acute medical diseases⁽²⁰⁾.

In what children can you anticipate gastric dilatation or hemorrhage? All three of these children were aged 2 years or less. Hodgson and Kennedy's 2 cases of gastrointestinal hemorrhage in meningitis occurred before the age of 2 years. Each of these 3 children had in common little body reserve. One was a premature child, 2 were from low income families whose diet and vitamin intake were inadequate. Two were anemic, with a hemoglobin of 9.2 and 10 Gm. respectively. The third probably would have had a similar count except for the extreme hemoconcentration of dehydration and shock.

Although all these factors were common to the 3 cases, they are the factors which make any illness severe and increase the

accompanying toxemia. Perhaps it should be stated that any factor which increases the severity of the illness increases the chances of gastric dilatation and hemorrhage. It might be wise to empty the stomach of all children in respiratory distress routinely, not only to prevent the very real danger of aspiration of the stomach contents if vomited, but to prevent the gastric dilatation which may occur if the stomach contents are not vomited.

There were some warning signs in these three children. The signs of reverse peristalsis—vomiting—occurred in 2; the third was too ill to vomit. Restlessness was noted in the one patient admitted prior to gastric hemorrhage. The parents of the other 2 children stated that both had been extremely restless.

After the gastric dilatation and/or hemorrhage, all 3 children exhibited coma, shock, shallow gasping respirations, coldness, extreme pallor to frank cyanosis, and abdominal distention. Gastric dilatation was diagnosed clinically in 2 cases, and probably was present in the third but was not noted. Two children returned dark blood initially through the Levin tube; the third patient, who did not survive, returned bright blood immediately. In the older child, aged 2 years, 8 months, the stomach returns continued dark, but in the younger child, aged 2 months, the bloody returns became bright red after the initial emptying of the stomach.

Treatment must be prompt. It consists of decompression by a Levin tube, and administration of fluids, blood, oxygen, and external heat. Vitamin K was given in all 3 cases. Adrenosem has been recommended for use in hemorrhage⁽²¹⁾, and was given in one case. Topical thrombin⁽²²⁾ and estrogen⁽²³⁾, although not used in these cases, have been recommended in gastric hemorrhage and might have been used.

The two patients who recovered had a very similar course. They were each given two blood transfusions, and had bloody returns from the tube for 36 hours and 48 hours respectively. Both had the tube removed at 72 hours, were discharged on the eighth and ninth days of their hospital stay, and are well two and three years later.

Conclusion

In any critically ill child who presents the picture of shock and abdominal distention with or without vomiting, the diagnosis of gastric dilatation and or hemorrhage in the course of the obvious infectious disease should be considered. It is possible that if the gastric dilatation and the shock are treated successfully, the subsequent course of the infectious disease will be uneventful. The diagnosis can be made clinically or by x-ray, but must be made immediately.

Three case reports of gastric dilatation and hemorrhage in acute infectious diseases are presented. If emergency treatment for gastric dilatation and hemorrhage had not been instituted promptly in the two surviving patients, their deaths would probably have been attributed to the infectious illness alone.

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The Use of Dimethylane-Reserpine Combination in Mental Disorders

A Preliminary Report

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and

LLOYD J. THOMPSON, M.D.

WINSTON-SALEM

The advent of ataraxic drugs and their successful use in institutionalized patients stimulated our search for a drug that could be used effectively and safely in the treatment of mild anxiety tension states. The need of the general practitioner for medication of this type is obvious. There are but few mild tranquilizing drugs that do not produce side effects typical of sedation.

One such agent is dimethylane* (2,2-diisopropyl-4-hydroxy methyl-1,3-dioxolane). The pharmacologic and therapeutic characteristics of this drug were reported by Berger and others⁽¹⁾. It was found to possess a wider margin of safety and greater activity than Myanesin. Although dimethylane meets the requirements of tranquilization without sedation, its duration of action is relatively brief, three to four hours.

Clinical studies by Boines, and Boines and Horoschak showed conclusively that dimethylane was effective in the management of anxiety tension states in meno-

pause⁽²⁾ and in dysmenorrhea⁽³⁾. Vivino and Ritter⁽⁴⁾ confirmed the results in dysmenorrhea and concluded that "the action of dimethylane in dysmenorrhea may be a combination of its musclerelaxing properties and its tranquilizing effect." Dimethylane has also been used successfully in the control of postalcoholic agitation⁽⁵⁾ and tension states⁽⁶⁾, anxiety associated with poliomyelitis⁽⁷⁾, and in tension states related to occupational stress⁽⁸⁾.

Reserpine, a pure crystalline alkaloid of *Rauwolfia* root, was reported to be effective in tranquilizing institutionalized patients. But in the doses commonly employed, 2 to 10 mg., it exhibits a sedative action and produces such disturbing side effects as dizziness, nausea, stuffy nose, diarrhea, and headache. Although the pharmacologic action of reserpine is not completely understood, it is thought to act as a tranquilizer at the hypothalamic level, affecting both the autonomic and somatic nervous systems. It apparently has a cumulative effect and relatively slow and sustained in its action, whereas dimethylane blocks the transmission of abnormal impulses at the spinal

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*The National Drug Company, Philadelphia.

interneuron, is quick-acting, and of relatively short duration.

In our experience, either reserpine or dimethylane, used alone, was helpful in alleviating the symptoms of anxiety tension states. It was thought, therefore, that a combination of these two drugs with their different rates, levels, and duration of activity might be more effective in controlling these symptoms than either drug alone. It was thought further that smaller doses of reserpine would probably not produce its characteristic side effects and might potentiate the effects of dimethylane in terms of prolonging tranquilization.

This report is concerned with the results of dimethylane-reserpine combinations* in the treatment of those mental disorders where anxiety tension states predominate. The promising results obtained with this combination in patients seen in routine office and clinical practice prompted our publishing a preliminary report at this time.

Method

Sixty-four selected patients, ranging in age from 14 to 64, received one enteric coated capsule containing 250 mg. of dimethylane and 0.25 mg. of reserpine after meals and before retiring for a period of four weeks.

All patients in our series received routine examinations to eliminate pathologic conditions contributing to anxiety tension states. The Department of Psychiatry diagnosed and placed the patients into one of the following categories based on the degree of anxiety: severe (those requiring hospitalization); moderate (those who were housebound and unable to carry on with their occupations and social contacts in a suitable manner), and mild (those who were able to carry on normal daily activities in some fashion but who showed mild anxiety complex symptoms). Patients in the "moderate" and "mild" categories were observed on an outpatient basis.

Prior to and at weekly intervals after the administration of dimethylane-reserpine the patients' pulse rate, blood pressure, and respiration were taken. In addition, each patient was also observed for evidence of sedation, dizziness, dry mouth, diarrhea and other side reactions.

*Kindly supplied for investigational use by the National Drug Research Laboratories.

Clinical results were graded as follows: good, for those patients who experienced total remission or relief of symptoms interfering with normal life, vocation and social activities; fair, for those whose presenting symptoms were relieved or whose general symptoms were improved; and, poor, for those who showed no response to medication or such minimal benefit that other factors could have been the cause of improvement.

To evaluate objectively the effectiveness of the combination and of its component drugs, a controlled follow-up study was conducted. Seven patients who completed the full course of combination therapy were then given 500 mg. of dimethylane four times a day for two weeks. Following this regimen they were put on reserpine, 0.5 mg. given four times a day, for two weeks.

The majority of the patients in our series were previously treated with such modalities as psychotherapy, sedatives, stimulants, reserpine, chlorpromazine, insulin subshock and electrotherapy, with varying degrees of relief.

Results

Of the 64 patients treated, 42 showed good results, 6 fair, and 9 poor. Seven discontinued treatment for various reasons. Two of the 7 discontinued therapy at the end of the second day, and, for statistical purposes, should be omitted from this study since no significant response could be expected in this period of time. The remaining 5 patients reported either slight nausea, digestive disturbance, or headache.

Table 1 summarizes our results in this group, which include patients with anxiety neuroses, hysteria, obsessive compulsive reactions, ambulatory schizophrenia, and manic-depressive and depressive reactions.

Anxiety reactions: Thirteen patients of this group presented typical signs of anxiety and tension such as nervousness, restlessness, inability to concentrate, agitation, fatigue, and headache. Many also complained of either indigestion, diarrhea, muscle aches, dysmenorrhea, or insomnia. Ten patients reported complete relief of the disturbing symptoms, which were replaced by a sense of well-being, increased appetite, a better sleep pattern, and a greater capacity for work.

Hysteria: The majority of these patients showed a good response to medication. Five of 7 in the group reported marked relief from anxiety symptoms, especially those associated with tension. Poor response seen in the remaining 2 patients appeared to be associated with chronicity of the disorder.

Obsessive-compulsive reactions: In 22 patients comprising this group, only 2 failed to show a favorable response to medication. Of these, one had severe symptoms of many years' duration while the other, with mild symptoms, discontinued therapy because of intestinal disturbance.

Schizophrenia: Of the 6 patients in this group manifesting anxiety tension, impulsiveness and withdrawal symptoms, 4 experienced marked relief from annoying symptoms, particularly those associated with tension, but promptly relapsed if medication was discontinued. Symptomatic improvement was associated with a better sleep pattern and a greater awareness of the immediate environment which facilitated management. One patient suffering from acute delusions and hallucinations responded to dimethylane-reserpine with some decrease in symptoms but no basic effect on the delusional system. Although not curative, medication was thought to be of some help in this very severe illness.

Manic-depressive: One patient in our series exhibited typical signs of manic depressive psychosis for years, with some basic neurotic features of obsessive-compulsive perfectionism and psychosexual conflict. Although medication was obviously effective, the patient found it frightening and upsetting and discontinued therapy after three days.

Depressive reactions: Thirteen patients showed moderate to severe reactions of long standing. Of these, 7 showed alleviation of depression and associated symptoms, while 5 showed no response or reacted negatively. Those who responded favorably slept and looked better, and took more interest in their affairs. Some showed an increased appetite and gained weight as a result. Five responded poorly and one discontinued medication because of side effects.

Patients who were judged to have obtained a good therapeutic response felt better on dimethylane-reserpine than on any previous regimen, without exception. With

some, relief was almost immediate; others were benefited within one to three weeks. Still others did not report significant response until medication was terminated at the end of the trial period. These patients requested that they be continued on medication, claiming that they felt so much better while taking dimethylane-reserpine.

It is interesting to note that of the 22 patients in our series who were classified in the 'severe' group and as a result were hospitalized, 13 obtained sufficient symptomatic relief to be discharged from the hospital before the end of the trial period. Further, the majority of patients who were treated on an outpatient basis were now able to relax and make a better adjustment to their environments.

Since no significant deviations in blood pressure, heart rate or respiration were observed in the first 30 patients to complete dimethylane-reserpine therapy, that phase of the investigation was dropped.

Seven of the 64 patients in our series were on reserpine alone or in combination with other drugs prior to this study. Six of these 7 reported that the symptomatic relief obtained with dimethylane-reserpine was of greater benefit than that obtained from reserpine alone. The seventh patient reported that there was no difference.

In the controlled study, patients reported varying responses to the component drugs, but all reported that the combination was of greater benefit in alleviating the symptoms of anxiety tension states than either drug used alone. The objective evaluation seemed to coincide with the subjective responses made by the patient.

Comment

From patients' subjective and objective responses and from our observations can be drawn the general impression that the combination of dimethylane-reserpine appears to be a useful therapeutic tool in the management of some mental disorders. The results of this investigation suggested that this combination was most effective in those mental disorders where anxiety and tension were the primary symptoms. The combination facilitated management and, as a result, psychotherapy was significantly shortened. Poor results appear to be associated with cases of extreme chronicity and fixed

Table 1

Summary of Results with Dimethylane-Reserpine					
Type and Degree of Illness	No. Patients	Therapeutic Response			
		Good	Fair	Poor	Discon'd
Anxiety neuroses	13				
Mild		8			3
Moderate		2			
Hysteria	7				
Mild		1			
Moderate		2			
Severe		2		2	
Obsessive-compulsive reactions	24				
Mild		8			1
Moderate		4	2		
Severe		6	2	1	
Schizophrenia	6				
Mild		1			
Moderate		1	1	1	1
Severe			1		
Manic-depressive	1				
Mild					1
Depressive reactions	13				
Moderate		3		2	
Severe		4		3	1
TOTAL	64	42	6	9	7

somatization reactions. It is our feeling that if the combination had not been discontinued so abruptly for experimental purposes and if maintenance therapy had been instituted, a more permanent reduction of anxiety and tension would have been observed.

In conclusion, therefore, it is our opinion that the combination of dimethylane-reserpine is of clinical value in alleviating anxiety tension states, depressive states, and even schizophrenic reactions. It can be used effectively and safely in routine office and clinic practice; the regimen is simple; side effects are mild and few in number, and there are no toxic effects.

From this brief clinical evaluation, it is felt that further study with this combination, perhaps varying the relative amounts of the component drugs, warrants further investigation.

Summary and Conclusions

1. Sixty-four patients with various mental disorders (table 1), seen in routine of-

fice and clinic practice, were treated with a combination of dimethylane-reserpine for a period of four weeks. Forty-two (66 per cent) showed good results, 6 (9 per cent) fair, and 9 (14 per cent) poor. Seven patients (11 per cent) discontinued therapy prior to the completion of the study for various reasons.

2. The combination proved to be of definite value in controlling the symptoms of certain psychiatric disorders, particularly those characterized by anxiety and tension. Those patients who showed a good to fair response were better able to make a normal adjustment to their environments.

3. In a controlled follow-up study dimethylane-reserpine proved to be more effective than either reserpine or dimethylane alone.

4. Side reactions were few and mild. No toxic reactions were observed.

5. Further intensive clinical research is warranted.

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"The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration. Whoever chooses this profession assumes the obligation to conduct himself in accord with its ideals"—Principles of Medical Ethics of the American Medical Association, Chapter 1, Section 1.

JANUARY, 1957

GENERAL PRACTICE IN NORTH CAROLINA

For more than a decade North Carolina has been a sort of medical guinea pig for the other states of the union. In 1945 the American Academy of Pediatrics selected it for a pilot study of child health services. The survey, made in cooperation with the U. S. Public Health Service and the U. S. Children's Bureau, lasted for two and a half years. The findings were not at all flattering to the state, but undoubtedly stimulated better care for our children. In 1951 North Carolina was selected by the National Commission on Financing of Hospital Care as the pilot state for an intensive study of hospitals. In 1953 the Cornell Crash Injury Research Project chose it for another pilot study.

The December issue of *The Journal of Medical Education*—the official organ of the Association of American Medical Colleges—devotes a whole volume to "an analytical study of North Carolina General Practice." The study was made by Dr. Osler L. Peterson, of the Rockefeller Foundation, and Drs. Leon P. Andrews and Robert S. Spain, assistant research professors, Program Planning Section, Division of Health Affairs, The University of North Carolina, with Dr. Bernard G. Greenberg, professor of biostatistics, University of North Carolina. The duration of the study, begun in July, 1953, was a little more than a year. Every effort was made to secure a representative group of general practitioners. The number finally selected for study was narrowed down to 88, located in all parts of the state.

The criteria used for evaluating their performance were, in the order of the importance attached: (1) the clinical history; (2) the physical examination; (3) the laboratory aids used; (4) therapy; (5) preventive medicine; and (6) clinical records. The doctors were graded in "qualitative ranks," according to the impression made on the study group. The outstanding practitioners were given the rank of V; those doing the poorest work, Rank I. Seven of the 88 men studied were given V rating; 15 were rated IV, 27 as III or "average," while 16 trailed with a rating of I.

It is, of course, hard to draw sweeping conclusions from the comparatively small number of general practitioners studied. Furthermore, the practice of medicine is so intensely individual that it is difficult for an onlooker to evaluate. No doubt many practitioners will sympathize with the two men who were eliminated from the study because they "felt that the presence of a third person would be detrimental to the physician-patient relationship."

Space limitation will not permit a detailed summary of the 165-page report, but some of the observations are selected for comment. The quality of work done did not necessarily correlate with the grades made in school, the length of hospital training, nor the number of organizations joined. It was noted and emphasized repeatedly, however, that as a rule the best work was done by those who had had the longest training

in internal medicine. There also was a definite relation between the number of medical journals purchased and the quality of work done. "The regular increase in the mean number of journals purchased with better quality of work leaves little doubt of the significance and importance of the association."

Another interesting observation was that the greatest proportion of general practitioners in the upper echelons were under 35 years of age, with those from 36 to 45 only slightly below. Of those from 46 to 65 there was a significantly smaller number in the upper third and a larger number in the lower third. The effect of age could, of course, be due partly to the better training and better selection of the younger men. It emphasizes, however, the importance of Osler's dictum that a true physician must be a student as long as he is in practice.

It should be noted that "no physician had been involuntarily excluded from all hospitals; all who desired an appointment were successful in procuring one in at least one hospital." Parenthetically, this is in marked contrast to Great Britain, where "Only a small percentage of British general practitioners had or have hospital appointments."

Of the 88 doctors studied, only 17 used the appointment system entirely for office practice. Sixteen used it partially, and 55 not at all. The authors comment that while "the majority of physicians stated . . . that the nature of their practices would not allow them to operate an appointment system," "in some instances it was believed that the failure to utilize this device for systematization of practice was due at least in part to the physician's own reluctance to discipline himself to this degree . . . physicians who attempted to utilize their time and that of their patients by means of an appointment system were on the average better doctors."

The principal criticisms of those in the lower ranks were: (1) failure to obtain an adequate history and to make a thorough physical examination; (2) in therapy, treating anemias, hypertension, and upper respiratory infections without definitive diagnosis and the careless use of antibiotics and anti-anemic preparations; and (3) failure to keep up with current medical literature.

The median income of the North Carolina general practitioner, as given to members of the study group, was appreciably higher than for United States physicians, as given by the Department of Commerce: \$15,000 and \$11,382 respectively. It should be noted that the income of the general practitioner was in direct proportion to the hours of work: from \$9,600 for 5 hours or less a day to \$27,500 for 15 hours or more.

The results of the study, as a whole, left a good impression of general practice in North Carolina. This impression was well expressed in the following paragraph from the section on the doctor's hours and wages: "During the course of this study the authors were impressed with the selflessness of many general practitioners. The irregularity and frequency of the demands made upon the physician's time are greater than in most professions. He is pictured in the minds of many as being ever available, never too fatigued to see one more patient, and having little personal need for rest or recreation. Many of the general practitioners participating in this study fit this picture."

* * *

DOCTORS AND THE DISABILITY PROGRAM

One of the greatest headaches—figurative if not literal—in store for the doctors of the country is the result of the disability features of the social security program adopted by Congress last year. Those veterans who were in practice during the Great Depression remember the epidemic of total and permanent disability that affected so many holders of life insurance policies which provided monthly payments for one certified by a physician as being totally and permanently disabled. A doctor who refused such a certificate to one of his patients was apt to lose both a patient and a friend.

Apropos of this matter, the A.M.A. Washington Letter for December 28 has a paragraph which should be of interest to all doctors—especially family doctors.

A recommendation of the Indiana State Medical Association is under consideration by the Social Security Administration. It would establish district or county committees of physicians to review the individual doctors' medical findings under the new law providing O.A.S.I.

payments to disabled at age 50. The committee would review the physician's report, further examine the applicant if it so desired, and be authorized to file the final report of impairment determination and make recommendations as to whether the report might be reversible by medical or other rehabilitative measures. In presenting the proposal to the Social Security Administration, the Indiana society declared that its plan would (a) afford an unbiased medical review of the case, (b) remove family and possibly political pressure from the physician, and (c) provide the state agency with a more factual and comprehensive report than it would otherwise obtain, "which should be of great assistance in making the final determinations as to disability payments."

Social Security Administration has not yet decided whether to adopt the procedure, but has it under study. A similar recommendation (Res. No. 25) is under study by the A.M.A. Board of Trustees.

This seems to be a sensible approach to a very knotty problem. While it would mean a great deal of work and responsibility for the members of the committee, it would take the pressure from the insuree's family doctor. It is assumed that no member of the committee would pass upon the claims of his own patients.

* * *

PSYCHIATRY IN AFRICA

One often hears the statement that psychosis and neuroses — especially anxiety neuroses—are the result of our modern civilization, and that primitive people are free from such disorders. An article in the *British Medical Journal* for December 15⁽¹⁾ contradicts this belief. The author is himself an African who got his psychiatric training in Britain and is now in charge of a psychiatric service in Nigeria, centered in a new hospital for mental diseases.

Dr. Lambo says that "anxiety state is by far the commonest psychological disorder in the primitive," and that "precordial distress, headaches, and gastric symptoms were by far the most common physical manifestations of this clinical reaction."

Hysteria is also quite common in his patients, and their superstitions contribute to this as well as to their anxiety.

An extremely interesting observation, which is contrary to popular belief, was that sexual neuroses were common, especially frigidity and dyspareunia. Interviews with the husbands of 20 women in the group revealed that 9 of them were impotent and one suffered from "pathological timidity."

Schizophrenia was "by far the commonest of all mental disorders in the Western Negroes."

Although the primitive Africans seem to be as susceptible as civilized races to most psychoses and neuroses, they may be thankful for one notable exception. "No cases of classical psychotic depression was encountered among the primitive population . . . All our depressive patients were westernized." Mania, however, was not uncommon in the primitive.

Dr. Lambo comments that this absence of depression in Africans may be more apparent than real—but at least suicide is rare: "A survey of nine villages showed that as far back as the elders could remember no cases of suicide has ever been reported or suspected."

An editorial comment in the same issue of the *British Medical Journal* summarizes very well the impression left by this article:

Dr. Lambo's observations on the frequency of neurotic anxiety states among the primitive section of the population come rather as a surprise. It seems that the life of these people is at least no less productive of neurotic anxiety than life in an industrialized urban civilization, if not more so. Possibly the happy primitive community which is free from neurosis will turn out to be a myth."

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In clinical medicine it is rare for the evidence to be sufficient to justify a conclusion on scientific grounds, but it would be quite unjustifiable on that account to suspend judgment and its consequent action. The situations that the doctor has to deal with commonly in clinical medicine cannot then be dealt with wholly by the methods and criteria of science and he has to bring to his aid a practical art. This is based on experience of similar situations, sympathy with and knowledge of human beings, and a cultivated intelligence.—Sir Francis Fraser: *The Changing Foundations of Medicine, The Pharos of Alpha Omega Alpha* 20:1 (Nov.) 1956.

President's Message

DOCTORS AND LEGISLATORS

During recent years, there have been proposed many, many acts of legislation which have been far from favorable to the practice of medicine as we know it and would like to preserve it. Far too many of these proposed acts have been made into laws, but a great majority have not.

In spite of seeming defeat, the stature of the medical profession, in the eyes of the legislators, has risen rather than fallen. Lawmakers are beginning to respect our opinion because they are beginning to realize that our opposition to unfavorable health measures does not come from personal and selfish interests, but from the sincere belief that the doctors should and do know best the medical needs of its people. They are beginning to realize that our profession understands the public and knows that it is frequently like a child who does not know what is medically best for it and desperately needs professional guidance. They are beginning to realize that our profession is not just against everything, but that our opposition to certain measures comes after those measures have been carefully surveyed and studied. They are beginning to realize that we are uniformly opposed to any form of third party domination of the practice of medicine, whether that third party be government, industry, or whatever. They are beginning to realize that we are uniformly opposed to any measure which might endanger the unlimited freedom of the choice of physician or the so important doctor-patient relationship. They are beginning to realize that we are unalterably opposed to any measure which limits or might lead to the limitation of the practice of medicine as we know it now.

Most legislators today not only respect but actually seek the considered opinion of their personal acquaintances in the medical profession on health affairs. We are now entering a new legislative year, both on the national and state level. I think it is incumbent upon the medical profession to see that all our legislators get the considered and personal opinion of their acquaintances in the medical profession. The

American Medical Association is proposing a rather personalized legislative program on a national level. The State Medical Society has an unusually active Legislative Committee. It is imperative that each county medical society not only have a legislative committee, but that it have designated members of the medical profession who are personal friends of the legislators from that county to express to those legislators the opinion of the medical profession on various proposed health measures.

It is my belief that H.R. 7225 was passed partly for political reasons and against the better judgment of some legislators who voted for it. The opposition to this bill by the medical profession was well organized, well considered, and well executed. However, it lacked the personal contact of individual doctors with individual legislators. This must not happen again. We can all rest assured that the legislative year of 1957 will bring forward, both at the national level and the state level, many proposed acts of legislation which are not in the best interest of the practice of medicine. We should be ready to oppose these measures vigorously after thoughtful consideration and study. The legislators cannot know of our opposition unless we tell them.

—Donald B. Koonce, M.D.

A.M.A. Honors TV Series

The American Medical Association, at its tenth annual Clinical Meeting in Seattle, Washington, cited CIBA Pharmaceutical Products, Inc. for service to the medical profession through its presentation of the national television series, "Medical Horizons."

A.M.A. president, Dr. Dwight H. Murray, presented the citation before the association's House of Delegates assembled for its annual meeting. The citation, approved by the A.M.A. Board of Trustees, was accepted by T. F. Davies Haines, president of CIBA.

"Medical Horizons" presents "live" documentary reports on the latest developments in medical science each week directly from important hospitals, clinics, and laboratories. The series, now in its second full year is presented with the cooperation of the American Medical Association, and is seen every Sunday afternoon at 4:30 P.M. (EST) over the ABC television network.

BULLETIN BOARD

COMING MEETINGS

Annual Public Relations Conference of the Medical Society of the State of North Carolina—Presbyterian Hospital, Charlotte, February 2.

Fourteenth Annual Watts Hospital Medical and Surgical Symposium—Durham, February 13 and 14.

Medical Society of the State of North Carolina, meeting of the Nominating Committee—Sir Walter Hotel, Raleigh, February 23.

Fourth Annual Seminar on Occupational Health—University of North Carolina School of Medicine, February 21.

Third North Carolina Conference on Handicapped Children—University of North Carolina School of Medicine, February 28, March 1.

American College of Surgeons, Sectional Meeting—Sheraton-Park Hotel, Washington, D. C., March 18-20.

Emory University School of Medicine, Course in Electrolytes—Emory University, Atlanta, Georgia, March 29 and 30.

Seventh Annual Congress on Industrial Health—Biltmore Hotel, Los Angeles, February 4-6.

Institute on Rehabilitation Center Planning—Morrison Hotel, Chicago, February 25-March 1.

A.M.A. Council on Foods and Nutrition, Symposium on "Fats in Human Nutrition"—Louisiana State University, New Orleans, March 15.

National Congress on Rural Health—Brown Hotel, Louisville, Kentucky, March 7-9.

College of Medical Evangelists, School of Medicine, Alumni Postgraduate Convention—Los Angeles, March 10-14.

American Academy of General Practice, Ninth Annual Scientific Assembly—St. Louis, Missouri, March 25-28.

Chicago Regional Committee on Trauma, American College of Surgeons—John B. Murphy Auditorium, Chicago, April 10-13.

Announcement

The Nominating Committee of the Medical Society of the State of North Carolina will meet at the Sir Walter Hotel in Raleigh, on Saturday evening February 23, according to an announcement by Dr. Claude B. Squires of Charlotte, chairman of the committee. This meeting is for the purpose of considering the committee's assigned duties and responsibilities and report for 1957. This announcement is being made in order that the committee may receive suggestions from interested members of the Society.

STATE SOCIETY PUBLIC RELATIONS CONFERENCE

The annual Public Relations Conference of the State Medical Society will be held in Charlotte on Wednesday, February 2, beginning at 5:30 in the

Nurses' Auditorium of the Presbyterian Hospital. The program will include four 2-minute speakers from the fields of education, religion, business, and medicine.

According to Dr. Amos N. Johnson, chairman of the Committee on Public Relations, speakers will include the following: Professor David C. Phillips, head of the Department of Speech and Drama, the University of Connecticut, Storrs, Connecticut; Dr. Wade H. Boggs, Jr., professor of Bible and Christian Doctrine, Presbyterian General Assembly Training School, Richmond, Virginia; Mr. W. Harold Trentman, president, Occidental Life Insurance Company, Raleigh; Dr. George C. Ham, professor and chairman of the Department of Psychiatry, University of North Carolina School of Medicine, Chapel Hill.

1957 DISTRICT RURAL HEALTH CONFERENCES

The Committee on Rural Health and Education of the State Medical Society will sponsor five district conferences in the spring in an effort to stimulate individual and community responsibility for better health and medical care. The schedule of meetings is as follows:

Second District—New Bern—February 27 or 28.

Fourth District—Wilson—March 4.

Sixth District—Butner—March 19.

Eighth District—Elkin—March 28.

Tenth District—Waynesville—April 3.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST COLLEGE

Dr. R. L. Wall has retired from his post of professor of anesthesiology at the Bowman Gray School of Medicine and director of the anesthesiology service in the North Carolina Baptist Hospital.

Beginning his practice of medicine in Winston-Salem in 1913, he limited his practice to anesthesiology in 1923. From 1925 to 1942 he was director of anesthesiology at two local hospitals, the City Memorial and North Carolina Baptist. He is a diplomate of the American College of Anesthesiology, a member and former director of the American Society of Anesthesiologists, and a member of the International Anesthesia Research Society. He organized and was first president of the North Carolina Society of Anesthesiologists in 1948. He is a member of the State Society's Anesthesia Study Commission and has been a member of the society's committee on anesthesia mortality. He is past president of the Forsyth County Medical Society, and for three years served as a member of the board of trustees of the North Carolina Baptist Hospital.

Pending the naming of a director of the section on anesthesia, Dean C. C. Carpenter has announced that Dr. LeRoy Crandell, assistant professor of anesthesiology, will serve as interim director.

Dr. Crandell, who completed his premedical education at Kansas State College and the University of Texas, was graduated from Cornell University Medical College in 1949. He served an internship in surgery-obstetrics-gynecology at the Grace-New Haven Community Hospital, followed by a three-year residency in anesthesiology at the New York Hospital (Cornell Medical Center). He joined the faculty of The Bowman Gray School of Medicine as instructor in anesthesiology in July, 1953, and concurrently was named assistant in the North Carolina Baptist Hospital anesthesiology service. In January of last year he was promoted to assistant professor of anesthesiology. He is a diplomate of the American Board of Anesthesiology, a member of the State Medical Society, the American Medical Association, the American Society of Anesthesiologists, and in 1956 was president of the North Carolina Society of Anesthesiologists. He is also a fellow of the American College of Anesthesiologists.

* * *

Dr. W. Norman Thornton, Jr., professor of obstetrics and gynecology and chairman of the department at the University of Virginia School of Medicine, addressed a joint meeting of the Bowman Gray Medical Society and the Sigma Xi Club on January 7. He spoke on the "Physiological Studies on the Human Placenta."

* * *

On January 14, Dr. John E. Howard, associate professor of medicine at Johns Hopkins University School of Medicine, delivered a paper on "Homeostatic Mechanisms in Calcium Metabolism" before the Bowman Gray Medical Society and the Sigma Xi Club.

* * *

Dr. W. H. Sprunt, Jr., professor of clinical surgery at the Bowman Gray School of Medicine, presided before the North Carolina Chapter of the American College of physicians when the organization was officially chartered on January 5. The charter was presented by Dr. H. H. Bradshaw, professor and director of the Department of Surgery at Bowman Gray and secretary of the Board of Governors of the American College of Surgeons. Officers of the new chapter are Dr. Sprunt, president; Dr. George T. Wood, High Point, vice president; and Dr. Alexander Webb, Jr., Raleigh, secretary and treasurer.

* * *

The Bowman Gray School of Medicine has been awarded two five-year research scholarships for two members of the faculty: Dr. Samuel H. Love, instructor in microbiology and immunology; and Dr. Harry M. Carpenter, instructor in pathology. The research grants, awarded by the National Institutes of Health, are designed to increase the manpower for research in the basic sciences, and to assist schools of medicine in developing and strengthening the basic science departments.

NEWS NOTES FROM THE DUKE UNIVERSITY SCHOOL OF MEDICINE

A new anesthesiology journal edited by Dr. C. Ronald Stephen of the Duke University School of Medicine will make its first appearance next month.

Entitled *Survey of Anesthesiology*, the bi-monthly journal will be published by the Williams and Wilkins Co., medical publishing house, Baltimore, Maryland.

Nineteen medical specialists in the United States, Canada and England are serving as consulting and associate editors.

Dr. Stephen, chief of Duke Medical School's anesthesiology division, points out that the journal will help anesthesiologists keep abreast of professional developments by providing condensations of articles published throughout the world. Editorial comments "will attempt to place the information in the contribution in its proper perspective in relationship to what is already known," he said.

Other features will include reproductions of "classic" contributions to anesthetic literature and a forum for expressions of opinion.

* * *

The newly organized North Carolina Chapter of the American College of Surgeons held its first annual meeting at Duke University on January 5. Features of the day-long program were operative clinics at Duke and Watts Hospitals, scientific talks, and the presentation of a charter for the chapter by Dr. Howard Bradshaw of Winston-Salem, secretary of the Board of Governors of the American College of Surgeons.

Participating in the scientific program were seven Duke physicians, who spoke on the following subjects: Dr. Ralph Arnold, professor of otology and professor of otolaryngology and ophthalmology—"Hearing Improvement by Surgery"; Dr. Leonard Goldner, associate professor of orthopaedics—"Laceration of Flexor Tendons in the Palm—Why Should Primary Suture Be Avoided?"; Dr. R. B. Carter, professor of obstetrics and gynecology—"The Vaginal Approach to Pelvic Pathology"; Dr. William Shingleton, assistant professor of surgery—"Nutritional Effects of Subtotal Gastrectomy"; Dr. W. G. Anlyan, associate in surgery, and Dr. R. W. Postlethwait, associate professor of surgery at Duke and assistant chief of surgery at the Veterans Administration Hospital—"Surgical Management of Chronic Venous Insufficiency"; and Dr. C. R. Stephen, professor of anesthesiology and chief anesthetist—"The Place of Muscle Relaxants in Surgical Anesthesia."

Taking part in the business session in addition to the president, Dr. William H. Sprunt of Winston-Salem, were Dr. George T. Wood of High Point, vice president, and Dr. Alexander Webb of Raleigh, secretary-treasurer.

* * *

Dr. William H. Knisely of the Duke University School of Medicine faculty has received a \$63,337

Senior Research Fellowship from the National Institutes of Health. His fellowship is one of 44 five-year awards made to promising young scientists in the United States and Canada under a new U.S. Public Health Service program. Designed to increase manpower for research in the basic medical sciences, the fellowships provide for a combination of teaching and research activities.

Dr. Knisely, an instructor in medicine and anatomy, is studying small living blood vessels in human beings and animals. His research is aimed at a better understanding of how these blood vessels function during health and illness.

A similar grant has been made to Dr. Leo Pine, now associate with the National Institutes of Health at Bethesda, Maryland, who will come to the Duke School of Medicine next July as assistant professor of microbiology.

* * *

Premedical advisers from colleges and universities in three states met in Durham last month for a two-day program aimed at fostering a closer relationship between the Duke University School of Medicine and premedical training institutions.

Some 15 advisers from North Carolina, South Carolina, and Virginia took part in the informal program. They conferred with Duke medical admissions committee members, observed interviews of prospective medical students, and talked with graduates of their institutions who are now studying medicine at Duke.

The meeting was the second phase of an annual program that includes visits by Duke medical admissions committee members to premedical training institutions in the three states.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

An annual memorial lectureship, to be called the Adam T. Thorp III-Alpha Omega Alpha Lecture, is being organized by the Gamma Chapter of AOA of the University of North Carolina School of Medicine.

The lecture will be a memorial to Adam T. "Skeets" Thorp III of Rocky Mount, who was killed in an automobile accident late this summer at the age of 7.

Dr. Adam T. Thorp II, Skeet's father, was graduated from the University of North Carolina School of Medicine last June. Dr. Thorp is now serving his internship in the Bethesda Naval Hospital at Bethesda, Maryland. He was elected in his junior year to membership in the AOA. Election as a junior is one of the highest honors a medical student can receive. In his senior year he served as secretary of the chapter.

The first of the series of memorial lectures will be given here May 15 by Dr. Robert E. Olson of the University of Pittsburgh, who has been studying the biochemistry of cardiac failure.

The lecture will be given each year by an invited medical scientist or teacher chosen from the most stimulating and talented of the profession in this country.

In announcing the memorial lectureship, Robert T. Whitlock, president of the Gamma Chapter of the AOA said: "We all find it difficult to express ourselves when a loss such as this is suffered by a beloved friend and colleague. The AOA feels privileged to offer this opportunity for such expression to those who feel so moved. The interest from our pooled contributions will go toward paying the expense of a guest lecturer each year, sufficient honorarium to draw the most excellent speaker. In the event the interest exceeds that needed for the lecture, a memorial scholarship will be offered to deserving medical students chosen by AOA with the approval of the faculty and dean."

Persons wishing to contribute to this fund may send contributions to Adam T. Thorp III Memorial Fund, North Carolina Memorial Foundation, Inc., P.O. Box 957, Chapel Hill.

* * *

A new premature nursery went into operation at the North Carolina Memorial Hospital of the University of North Carolina recently, according to an announcement by Dr. Robert R. Cadmus, hospital director.

The new infant care center provides service not only for premature infants, but also for other acutely ill new-born babies who require special attention.

This facility is being developed as a new program under the direction of Dr. E. C. Curnen, Jr., head of the Department of Pediatrics of the School of Medicine and chief of the Pediatric Service of North Carolina Memorial Hospital.

The new infant care center was designated as a State Approved Premature Center by Dr. A. H. Elliot, director of the Personal Health Division of the North Carolina State Board of Health. The State Board is sponsoring three of the beds in the nursery.

* * *

Christmas carols and tall tales of the merry old elf from the North Pole were heard throughout the children's section of the North Carolina Memorial Hospital during this holiday season. This was made possible by the installation of a new intercommunication system recently in the University of North Carolina hospital.

The new unit, costing about \$1,500, was donated by the Sigma Sigma Sigma Sorority, a national social sorority and a member of the National Panhellenic Council. The money for the system came from the Robbie Page Memorial Fund, a sorority project.

* * *

Two University of North Carolina professors were among the scientists elected to fellowships in the New York Academy of Sciences. They were Dr. Edward C. Curnen, Jr. and Dr. John Gulick.

Dr. Curnen is a professor and chairman of the Department of Pediatrics in the School of Medicine. Before coming to the University, he was connected with the Harvard and Yale medical schools. He has done extensive research in the field of infectious diseases.

Dr. Gulick is an assistant professor of anthropology.

* * *

The Fifth Annual Ross Herman Jennings Bryson Memorial Lecture was delivered on December 20 at the University of North Carolina.

The lecture, sponsored by the School of Medicine, was delivered by Dr. Horace Winchell Magoun, professor of anatomy at the University of California at Los Angeles. His subject was "The Waking Brain."

The Bryson Lectures were set up as a memorial to Ross Herman Jennings Bryson, a UNC medical student, who died in 1951. Their purpose is to present authorities of national standing in the fields of neurology and the history of medicine.

* * *

The University of North Carolina has been awarded a training grant of \$202,670 under the National Mental Health Act by the National Institute of Mental Health of the Department of Health, Education, and Welfare.

The announcement of the grant was made on December 19 by Dr. Gordon W. Blackwell, director of the University of North Carolina Institute for Research in Social Science, and Dr. Henry T. Clark, Jr., administrator of the Division of Health Affairs.

The funds will be used to support a program of doctoral training for social scientists in the field of mental health. There are five traineeships for candidates for Ph.D. degree, one postdoctoral traineeship, and two faculty positions combining teaching and research.

The program will be directed by Dr. Harvey L. Smith, director of the Social Research Section of the Division of Health Affairs.

The entire program has been and will be conducted in close connection with the Department of Psychiatry of the UNC School of Medicine.

* * *

The fourth annual Seminar on Occupational Health will be held at the University of North Carolina School of Medicine on February 21, according to an announcement from Dr. William P. Richardson, assistant dean for Continuation Education.

This Seminar will be devoted to specific problems faced by the industrial physician. Hearing, emotional, and dermatologic problems, and back sprain and pain are the subject areas to be discussed. A complete program will be mailed to physicians in the two Carolinas and Virginia in January.

This program is designed to meet the needs of part or full-time physicians in industry and is

sponsored by the School of Medicine of the University of North Carolina, the Occupational Health Committee of the North Carolina Medical Society, and the Liberty Mutual Insurance Company.

* * *

The Third North Carolina Conference on Handicapped Children will be held at the University of North Carolina School of Medicine on February 28 and March 1, according to an announcement by Dr. William P. Richardson, assistant dean for Continuation Education.

This year's conference will be devoted to the problems of speech and hearing, and will offer a distinguished group of speakers who will cover all aspects of these problems. They keynote speech will be given by Dr. Wendell Johnson, professor of speech pathology at the University of Iowa. Other invited speakers will be: Dr. Jon Eisenson of the Speech and Hearing Clinic at Queens College, New York; Dr. William G. Hardy of the Johns Hopkins School of Medicine; Dr. Herbert K. Cooper, director of the Lancaster, Pennsylvania Cleft Palate Clinic; and Dr. Orvis C. Irvin, professor of psychology at the University of Iowa.

In addition to these speakers there will be panel discussions of three case presentations of children with speech or hearing defects and a period devoted to small group conference on specific problems.

Subject areas to be included at this conference are Aphasia, the Development of Speech, The Cleft Palate, The Parents' Part, Identification of Hearing Defects, Psychological Problems in Speech and Hearing, and Articulatory Defects.

This conference is sponsored by the Coordinating Committee for Handicapped Children of North Carolina Health Council, the North Carolina Speech Therapists Association, and the Nemours Foundation.

Everyone interested in these problems of handicapped children is invited to attend.

NORTH CAROLINA ENT SOCIETY

The date for the acceptance of papers and films for the program of the Sixth International Congress of Otolaryngology has passed and the scientific program has been completed. There are 238 papers that will be presented simultaneously in four sections during each General Session. These represent contributions from otolaryngologists in 35 countries and deal with a remarkably wide variety of subjects in the specialty.

Applications for the presentation of films have been sufficient to provide 18 hours of motion pictures which will run simultaneously with the presentation of scientific papers.

Forms for requesting hotel reservations in Washington have been distributed to all who have registered as Members of the Congress. Those wishing to register should communicate with the General Secretary, 700 N. Michigan Avenue, Chi-

cago, Illinois, U.S.A. Applications for hotel accommodations will be sent as soon as registration is completed.

NORTH CAROLINA HEART ASSOCIATION

The thousands of Tarheels who suffer from high blood pressure were urged recently by Dr. Edward P. Benbow of Greensboro, president of the North Carolina Heart Association, to subscribe to six New Year's resolutions:

"Resolved that in 1957 I will:

1. See my doctor regularly, and cooperate with him in carrying out his instructions.
2. Try not to worry. (Worry, nervous tension and emotional stress all help to push blood pressure up, Dr. Benbow pointed out.)
3. Get plenty of sleep, taking a short nap or two during the day if possible. (Blood pressure is lowest during sleep and rises during waking hours.)
4. Rest before becoming tired. (Avoid the tenseness and irritability that go with fatigue.)
5. Engage in mild exercise. (Avoid competitive sports in which it is difficult to quit when tired.)
6. Keep my weight normal. (Overweight overworks the heart.)"

High blood pressure, or hypertension, is a leading cause of heart and blood vessel disease, according to the Heart president, and the cause is, in most cases, unknown. Research scientists throughout the country, including those in North Carolina's three medical centers—Duke, Bowman Gray, and the University at Chapel Hill—are working constantly to find these still-unknown causes. Much of this research is made possible by public contributions to the Heart Fund campaign, which is conducted each February in every community in the nation, Dr. Benbow stated.

"This leads me to add another resolution for the New Year," he said. "It is: Resolved that I will do all within my power to advance the nationwide fight against heart disease by supporting the 1957 Heart Fund."

* * *

Parents and school teachers have been urged to watch out for sore throats among children by Dr. William L. Fleming, chairman of the Department of Preventive Medicine at the University of North Carolina School of Medicine, and chairman of the North Carolina Heart Association's Health Education Committee.

"Winter usually brings a rise in the incidence of colds and sore throats," said Dr. Fleming, "and this increases the possibility of strep infection, which can lead to rheumatic fever. School teachers should ask any child attending class with a sore throat to remain at home. Parents should check their child's sore throat with their family physician and follow his advice in order to ward off the danger of rheumatic fever. If the child has a hemolytic streptococcus infection," he continued,

"it is not only contagious to others, but in at least three cases in a hundred the complication of rheumatic fever follows untreated streptococcal infections and frequently leads to heart damage."

ROBESON COUNTY MEDICAL SOCIETY

The Robeson County Medical Society held its annual Ladies' Night and Christmas party December 3, 1956, at the Lorraine Hotel in Lumberton. Numerous doctors and their wives from surrounding counties and adjacent medical societies were guests of the Society for open house at the new Robeson County Memorial Hospital wing and for the Christmas party.

Dr. Wilburt C. Davison, dean and professor of pediatrics, Duke University Medical School, was guest speaker, and spoke on "Heredity and Genetics." Dr. Jay Arena and Dr. Jerry Harris, also of Duke, were guests.

EDGECOMBE-NASH MEDICAL SOCIETY

The following officers have been elected to serve the Edgecombe-Nash Medical Society for the coming year: president, Dr. R. D. Kornegay; first vice president, Dr. J. R. Chambliss; second vice president, Dr. T. B. Suiter, Jr.; secretary-treasurer, Dr. N. B. Carter; editor of the Bulletin, Dr. B. M. Gold.

NEWS NOTES

Dr. Henry H. Nicholson, Jr., has announced the opening of his office for the practice of general surgery and proctology at Doctors Building, 1012 Kings Drive, Charlotte.

* * *

Dr. George D. Wilson, Asheville, has been appointed a member of the Council of the Southern Medical Association from North Carolina for a regular term of five years, which began at the close of the Washington meeting in November. The appointment was made by the president, Dr. J. P. Culpepper, Jr., Hattiesburg, Mississippi.

Dr. Wilson succeeds Dr. H. L. Brockmann, High Point, whose term expired with the close of the Washington meeting and who, having served the Constitutional limit, was not eligible for reappointment.

* * *

Dr. Mark M. Lindsey of Hamlet is Governor of the 281st District of Rotary International, for the 1956-1957 fiscal year. As Governor, he coordinates the activities of 33 Rotary Clubs in North Carolina.

EMORY UNIVERSITY SCHOOL OF MEDICINE

Course in Electrolytes

The Emory University School of Medicine has announced a two-day course in Electrolytes, March 29 and 30. The course will be under the direction of Dr. Arthur Merrill, associate professor medicine, and other faculty members of Emory University.

The visiting faculty will include Dr. Ted S. Sadowski, professor research medicine, University of Pittsburgh, Pittsburgh, Pennsylvania, and Dr. Louis G. Welt, professor of medicine, University of North Carolina, Chapel Hill. For further information, address: Postgraduate Teaching Program, Emory University School of Medicine, Atlanta Georgia.

AMERICAN COLLEGE OF SURGEONS

Sectional Meeting

The Sectional Meeting of the American College of Surgeons will be held in Washington, D. C., at the Sheraton-Park Hotel March 18-20.

Four distinct attractions are planned for visiting surgeons by Dr. W. Ross Morris and his committee of Fellows in the Capital City: (1) the usual program with concentrated teaching material of interest to general surgeons and surgical specialists; (2) a full day's sessions for obstetricians-gynecologists; (3) ophthalmology program at Walter Reed Hospital; and (4) a symposium on "What's New in Surgery" the afternoon of March 20, followed on March 21 with a tour of medical installations of the federal services in the Washington area. Such a plan, by first presenting the symposium, will allow registrants an opportunity to hear brief papers from individuals concerned with research projects at federal installations and to follow up those reports the next day by actually visiting the laboratories to hear about various advancements being made in surgical research.

NEWS NOTES FROM THE AMERICAN MEDICAL ASSOCIATION

A.M.A. Rural Health "Derby" March 7-9

The Blue Grass country of Louisville, Kentucky, will be the scene of the American Medical Association's rural health "derby" March 7-9. Sponsored by the Council on Rural Health, this twelfth National Conference on Rural Health will be held at the Brown Hotel. It will feature discussions on various problems of rural health and medical care built around the theme of "Together We Build." Scheduled to speak Thursday morning, March 7, are Dr. George F. Lull, A.M.A. secretary-general manager; Dr. F. S. Crockett, Council chairman; Dr. Austin Smith, A.M.A. Journal editor, and Dr. Julius Michaelson, chairman, Alabama State Medical Association committee on medical service and public relations.

Problems of medical education will be outlined during the afternoon session by Dr. Edward Turner, secretary, A.M.A. Council on Medical Education; Dr. J. Murray Kinsman, dean of medicine at the University of Louisville; Dr. Charles Bush, resident physician planning to enter rural practice in Kirkland, Indiana, and Dr. W. Wyan Washburn, chairman, North Carolina State Medical Society Committee on Rural Health and Education.

The Friday program will cover the economics of agriculture and medical and hospital care costs

and health and medical care problems of farm laborers and migrant workers.

A.M.A. To Survey County Medical Societies

Questionnaires to determine the scope of activity in various areas—including public education, community service, society projects, meetings, personnel, and finances—will be distributed early this year by the American Medical Association to all county medical societies. The fifth biennial survey of county medical society activities is being undertaken by the Council on Medical Service and the Department of Public Relations with the assistance of other A.M.A. departments. More than 1,200 county societies supplied information for the 1955 survey, and it is hoped that an even larger number will complete the 1957 questionnaires.

A.M.A. Studies Medical Care Payments for Indigents

A number of amendments which provide a new method of financing medical care for indigent persons receiving state Public Assistance aid were passed by the 1956 Congress. The A.M.A. Council on Medical Service's Committee on Indigent Care has studied the changes these amendments make in state and local indigent care plans and prepared a question-and-answer survey for distribution to state medical societies. The Committee's "guides" for indigent care plans also have been brought up to date for state society use.

After July 1, 1957, the federal government will reimburse the states on a 50-50 basis for medical care expenditures. The federal Bureau of Public Assistance pays half the amount expended in any program which meets its standards, up to an average of \$6.00 per month for adults and \$3.00 per month for children. The Bureau is attempting to encourage expansion of the medical care benefits available after July 1, when the new system of financing takes effect.

The programs involved in this new plan include the federally aided Aid to the Blind, Aid to Dependent Children, Old Age Assistance, and Aid to the Permanently and Totally Disabled. These Public Assistance programs are organized and administered by the states—the federal government participates only in the financing.

Any questions regarding the new plan should be referred to John F. Burton, M.D., Committee chairman, at A.M.A. Headquarters, Chicago.

A.M.A. Publishes New Guidebook On Maternal Death Studies

A new "Guide for Maternal Death Studies" will be made available through the American Medical Association's Council on Medical Service for distribution to state and county medical societies interested in developing similar studies. The publication will include—in addition to the guides—a description of seven maternal death study committees now in operation, sample forms, material showing how the results of these studies are being used in postgraduate education, and a list of both



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direct and indirect causes of obstetric death. The latter information coordinates the code numbering system of the "Standard Nomenclature of Diseases and Operations," with the categories established by the Sixth Revision of the International Lists of Diseases and Causes of Death.

"Home Care" Information Available from A.M.A.

Because of increased interest among medical societies in organized "home care" programs—such as the one inaugurated by Montefiore Hospital (New York) several years ago — the A.M.A.'s Council on Medical Service recently undertook a study of existing programs throughout the country. The new study includes information on the organization, development, financing, medical services provided, and problems encountered in the various home care programs. Any medical society desiring further information should write the Council.

A.M.A. COUNCIL ON FOOD AND NUTRITION

"Fats in Human Nutrition" will be discussed in a symposium to be held March 15 in the Louisiana State University auditorium, New Orleans, under the sponsorship of the American Medical Association's Council on Foods and Nutrition.

Cooperating in presenting the symposium will be the Orleans Parish Medical Society, the New Orleans Graduate Medical Assembly, the School of Medicine of Louisiana State University, and the Tulane University School of Nutrition.

Speakers will include outstanding men in nutrition, biochemistry, pediatrics, heart disease, and other allied fields.

Special emphasis will be on fats, cholesterol, and atherosclerosis, according to Dr. Philip L. White, secretary of the Council on Foods and Nutrition. The meeting is especially planned for general practitioners and other physicians, nutritionists, educators, home economics, and others interested in nutrition.

INTER-STATE POSTGRADUATE MEDICAL ASSOCIATION

Dr. Tom D. Spies, Birmingham, Alabama, and Chicago, Illinois, was unanimously elected president-elect of the Interstate Postgraduate Medical Association of North America by its Board of Trustees at the annual meeting of the Association in Cleveland, Ohio, in October. The Association is primarily a postgraduate teaching organization.

Dr. Spies is scientific director of the Nutrition Clinic, Hillman Hospital, Birmingham, and professor and head of the Department of Nutrition and Metabolism, Northwestern University Medical School, Chicago.

NATIONAL FOUNDATION FOR INFANTILE PARALYSIS

An upsurge of polio vaccinations is the objective of an all-out effort of March of Dimes volunteers late in January. As a result, physicians in all parts of the country may get telephone calls for information as well as office visits.

January is March of Dimes month; this year, along with their fund raising activities, the millions of volunteers of the National Foundation for Infantile Paralysis are undertaking a broad-scale vaccine education program.

The high point will come during the last week in January, when the annual "Mother's March against Polio" takes place. During that week some 3,000,000 "marching mothers" will personally visit 40,000,000 homes throughout the United States to receive contributions to the continuing fight against polio. But this year they also will deliver to each home a vaccine reminder and record card.

MODERN MEDICINE AWARDS

Outstanding contributions to medical progress by 10 American physicians and researchers will be recognized by the 1957 Modern Medicine awards for distinguished achievement. Among the doctors named is Eugene A. Stead, Jr., M.D., 48, professor of medicine at Duke University School of Medicine, Durham, for "distinction as a stimulating teacher and as an investigator of the mechanisms of heart failure and of water and salt balance."

Portraits of the winners will be featured on the January 1, 1957 cover of the semi-monthly journal, devoted to diagnosis and treatment and circulated among most of the practicing physicians of the United States.

Nominations for the annual awards were made by the deans of medical schools and by readers of the journal who were asked to make their selections from among general practitioners, specialists, teachers, and investigators.

The board of editors headed by Dr. Walter C. Alvarez, editor in chief, made the final choices. Award winners each will receive a plastic-mounted certificate proclaiming the individual's special distinction.

AMERICAN POST-GRADUATE ASSEMBLY IN FERTILITY AND STERILITY

The New York Medical College-Metropolitan Medical Center announces the First American Post-Graduate Assembly in Fertility and Sterility, to be held in New York City at the College and affiliated hospitals from May 18-31.

Emphasis in the course will be placed on the clinical aspects of human infertility including recent advances in diagnosis and therapy. A unique feature will be special sessions devoted to methods and problems in the organization and administration of sterility clinics, services and teaching programs.

The course has been scheduled for the end of May in order to allow the registrants the opportunity to attend the annual scientific meetings of the American Society for the Study of Sterility, The Endocrine Society, and the American Medical Association, which will be held in New York starting May 31.

Information and applications may be obtained from Dr. Ralph E. Snyder, Dean, New York Medical College, 1249 Fifth Avenue, New York 29, New York. Registration is of necessity limited. The tuition is \$150.

WORLD MEDICAL ASSOCIATION

In activities to fulfill its objectives "to maintain the honour and protect the interests of the medical profession" and "to assist all peoples of the world to attain the highest possible level of health." The World Medical Association has adopted an emblem to be used by civilian doctors, their ancillaries, and civil defense installations.

Studies of the fourth Geneva Conventions and Conferences with representatives of the International Committee of the Red Cross revealed that the protection of the Red Cross Emblem did not and could not apply except to doctors, ancillaries, and medical installations in military organizations. Hence, in time of war, the civilian doctor, his assistants, and civil defense units not under military control were without protection in carrying out their responsibilities to the population.

The World Medical Association has adopted a medical emblem and a Code of Medical Ethics in time of war. These were recommended by a joint Committee made up of representatives of the International Committee of the Red Cross; the International Committee on Military Medicine and Pharmacy and The World Medical Association with the World Health Organization providing an Observer. Adoption by the member associations and legislative enactments in each country and recognition at the international level to insure complete protection under the emblem is now being implemented.

The new medical emblem destined to protect civilian doctors, their ancillaries and civilian defense units is a red staff and serpent upon a white field. The staff is represented by a vertical line; the serpent by a sinuous line over the vertical line with two (2) undulations on the left side and one (1) undulation on the right side.

* * *

The World Medical Association announced recently its efforts to aid Hungarian refugees having professional or technical skills in the medical field to enable them to enter useful lives in the United States.

Dr. Louis H. Bauer, Secretary General of The World Medical Association said that many Hungarian physicians have been compelled to attempt to escape Austria because of the A.V.O. (Hungarian Secret Police) has been arresting all doctors

in Hungary who treated injured revolutionaries and failed to report their services as required by law.

The World Medical Association effort, Dr. Bauer explained, takes two forms: one, an appeal to physician members of its United States Committee for employment opportunities for medically qualified refugees; and second, an appeal to corporate members of the United States Committee for advice on employment opportunities, and positions that might be made available to these medical refugees.

INTERNATIONAL COLLEGE OF SURGEONS

The International College of Surgeons extends a cordial invitation to all physicians, medical personnel, and their friends to attend its tenth International Congress in Mexico City, February 24-28.

Four days will be devoted to the scientific program, to be presented at the University of Mexico. This will cover all phases of surgery. Blocks of rooms have been set aside in Mexico City's finest hotels for those attending. Social functions have been scheduled. For those who wish to see something of the country, two post-congress tours have been arranged.

In view of the large attendance which is expected, and the shortness of time, reservations should be made at once. To simplify the making of arrangements, the International Travel Service, Inc., Palmer House, Chicago 3, Illinois, has been chosen to handle registrations for the congress, hotel reservations and travel. Inquiries for further information should be directed to the International Travel Service, Inc.

* * *

Mid-Atlantic Regional Meeting

The United States Section, International College of Surgeons, will hold its Mid-Atlantic Division meeting in the Greenbrier Hotel, White Sulphur Springs, West Virginia, February 10-13.

Dr. Elbyrne G. Gill of Roanoke, Virginia, regent of the Section for Virginia, is general chairman of the meeting. Dr. Gill and Dr. Ross T. McIntire, Chicago, executive director of the College, are joint chairmen of the program committee. Dr. William C. D. McCuskey of Wheeling, regent for West Virginia, will preside, with Dr. Francis M. McGovern of Danville, Virginia, as secretary.

The scientific program will consist of panels and presentation of individual papers and motion pictures.

INTER-AMERICAN MEDICAL CONVENTION

The Second Inter-American Medical Convention will convene at the Hotel El Panama, Panama City, Republic of Panama, April 3, 4 and 5, under the sponsorship of the Medical Society of the Isthmian Canal Zone, a chapter of the American Medical Association since 1906. Colonel Charles O. Bruce, MC, USA, chief health officer of the Panama Canal

Company and president of the Medical Society, will act as keynote speaker at the invocation ceremonies, which will include addresses by the President of the Republic of Panama and by the Governor of the Panama Canal Zone.

Registration will take place at the Hotel El Panama at 9:00 a.m. April 2, the registration fee being \$5.00. The program will be wide in scope, and on the order of a state medical convention in the United States. Speakers will be from North and South America, and all papers will be translated into both English and Spanish. For further information write to Dr. William T. Bailey, Chairman of the Convention Executive Committee, Box "O", Ancon, C.Z.

HEALTH INSURANCE INSTITUTE

The role of insurance companies in administering the Defense Departments Medicare program for families of members of the Armed Forces in 17 states was described recently by spokesmen for the health insurance companies.

The Medicare program was high on President Eisenhower's list of recommended legislation during the last session of Congress and goes into operation today.

Members of families of the Army, Navy, Air Force, Marine Corps, U. S. Public Health Service, U. S. Coast Guard and Geodetic Survey are eligible under the program under the government's regulations.

The Defense Department announced Wednesday that it has awarded the prime contract for administration of the program in Mid-Western and South-Eastern states to Mutual of Omaha. More than 30 health insurance companies located in those areas had notified the government of their willingness to serve as contractors.

Mutual of Omaha is now engaging in subcontracting negotiations with three other insurance companies. It is estimated by the Defense Department that benefits to be paid under the program will total 76 million dollars yearly. In the states where the program is to be administered by the insurance companies, the claim payments could run as high as \$1,500,000 a month, an insurance company spokesman estimated.

The insurance companies will receive claims for hospitalization costs from more than 700 hospitals in the 17-state area that have indicated their desire to participate in the program. The companies will pay the hospitals for the claims. Hospitals are to be required to itemize their charges and payment will be made for room cost, use of operating rooms, anesthesia, and drugs and dressings.

The hospitals are required to obtain proof that patients are eligible under the Medicare program and must be on the alert not to provide services not authorized by the government, such as cosmetic surgery. Hospitals are defined under the program

to exclude rest and convalescent homes, public institutions and government hospitals and similar institutions. If there is evidence of excessive charges, the government can deny further participation in the plan by any hospital.

After immediate processing of claims submitted by the hospitals, the insurance companies will then draw checks paying the hospital. The government will reimburse the companies each month for these claim payments by the companies.

It was emphasized that the program will be operated by the insurance companies on a non-profit basis. The companies will be reimbursed only for operating costs incurred, and the government will audit the Medicare records of the companies periodically.

Contracts between the Defense Department and the insurance companies, as well as with Blue Cross organizations which are handling the program in other states, will be subject to renewal and renegotiation on June 30, 1957.

U. S. ATOMIC ENERGY COMMISSION

R. W. Cook, acting general manager of the U. S. Atomic Energy Commission, has announced the appointment of Dr. Harry Davis Bruner as chief of the Medical Branch of the Commission's Division of Biology and Medicine. Dr. Bruner succeeds Dr. Roy E. Albert, who has accepted a research and academic appointment at George Washington University, Washington, D. C.

Dr. Bruner has been chairman of the Department of Physiology at Emory University, Georgia, since 1952.

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

For the second time, a Federal court has determined that the Hoxsey medicines for internal cancer are worthless. On November 15, 1956, after a six-week trial in the Federal court at Pittsburgh, the jury returned a verdict that these medicines, in pill form, were illegally offered as an effective treatment for cancer. On November 16, U. S. District Judge John L. Miller signed an order of condemnation stating that the pills were misbranded as charged by the Government and ordering their destruction.

The public should know, however, that this action does not end the menace of this fake treatment. It merely means that half a million of the Hoxsey pills, which were seized shortly after the opening of a second Hoxsey Clinic at Portage, Pennsylvania, will now be destroyed. An injunction is being sought to stop further interstate shipment of the pills. Every legal means will be used to protect consumers from being victimized by this worthless treatment.

In the meantime it is of the utmost importance that cancer patients and their families, who may be planning to try the Hoxsey treatment either at

Dallas, Texas, or Portage, Pennsylvania, should acquaint themselves with the facts about it. All such persons are advised to secure a copy of the Public Warning which was issued by the Food and Drug Administration last April. They may do this by writing to the Food and Drug Administration, Washington, D. C.

BOOK REVIEWS

The Recovery Room: Immediate Postoperative Management. By Max S. Sadove, M.D., and James H. Cross, M.D., with contributions by 24 authorities. 597 pages. Price, \$12.00. Philadelphia: W. B. Saunders Company, 1956.

Twenty-six specialists have collaborated to describe in concise detail the immediate postoperative care of the surgical patient. At times the individuality of the patient is lost in this conciseness, especially in regard to preconceived dosages of drugs for preanesthetic medication and postoperative pain relief. In the management of cardiac arrest and hypothermia detail is sacrificed. The first and last chapters deal with the organization, special equipment, and nursing care necessary for the effective functioning of the recovery room. Thirteen chapters are devoted to special postoperative problems which are peculiar to each of the various surgical specialties. The most extensive chapter deals with the management of circulation, respiration, shock, and nutrition.

This is a book that deserves a thorough review by every physician who participates in the immediate postoperative management of the surgical or obstetrical patient.

Books Received

Ciba Foundation Symposium, jointly with the Physiological Society and the Britist Pharmacological Society: Histamine. By G. E. W. Wolstenholme and Cecilia M. O'Connor. 472 pages. Price \$9.00. Boston: Little, Brown and Company, 1956.

Ciba Foundation Colloquia on Endocrinology. Vol. IX. Internal Secretions of the Pancreas. Edited by G. E. W. Wolstenholme and Cecilia M. O'Connor, editors for the Ciba Foundation. 292 pages. Price, \$7.00. Boston and Toronto: Little, Brown and Company, 1956.

A History of the Therapy of Tuberculosis and the Case of Chopin. By Esmond R. Long, M.D. 71 pages. Price, \$2.00. Lawrence, Kansas: University of Kansas Press, 1956.

Low-Fat Cookery. By Evelyn S. Stead and Gloria K. Warren. With an Introduction by Eugene A. Stead, Jr., M.D., and James V. Warren, M.D. 184 pages. Price, \$3.95. New York, Toronto, London: Blakiston Division, McGraw Hill Book Company, 1956.

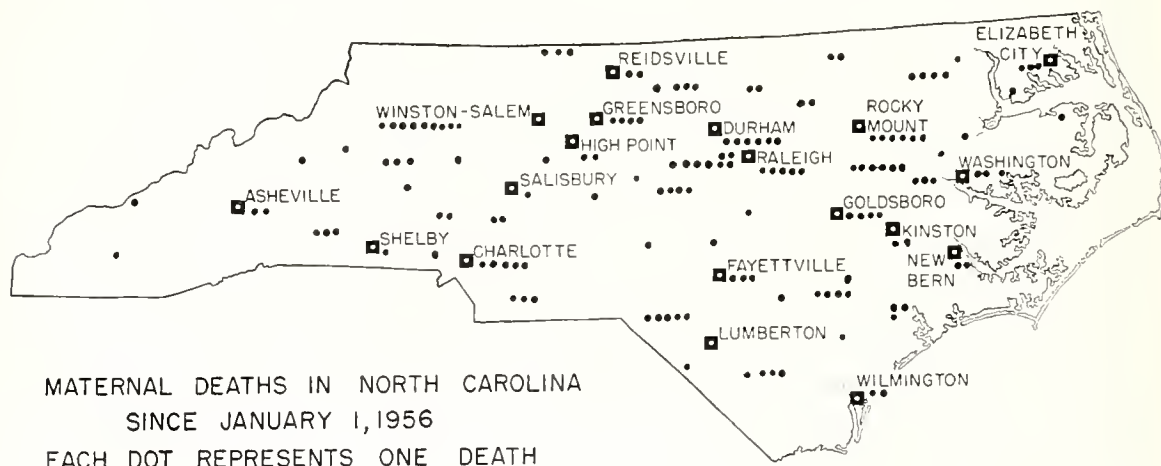
Your Blood Pressure and How to Live With It. By William A. Brams, M.D. 160 pages. Price, \$2.95. Philadelphia and New York: J. B. Lippincott Company, 1956.

Dictionary of Dietetics. By Rhoda Ellis, Ph.D. 152 pages. Price, \$6.00. New York: Philosophical Library, 1956.

Classified Advertisements

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In Memoriam

Hodge Albert Newell, M.D.

Dr. Newell was born in Franklin County, the son of the Rev. George W. Newell and the former Sarah Coppedge, on August 22, 1883. He completed his undergraduate work and graduated from the Law School of Wake Forest College in 1902. He received his medical education at the College of Physicians and Surgeons, Baltimore, Maryland, and was graduated from that school of medicine in 1906. Dr. Newell served an internship and residency at Mercy Hospital, Baltimore, Maryland.

From 1908 until 1915, Dr. Newell carried on general practice in Louisburg, North Carolina. On June 1, 1915, he married the former Mary W. Hayes of Louisburg. Dr. Newell left his practice in Louisburg to go to the Mexican Border. He entered the United States Army as a captain. He also served his country in World War I for 12 months overseas in command of the 105th Medical Regiment, 30th Division, and rose to the rank of Colonel, which rank he retained until his death.

At the end of World War I, Dr. Newell attended the New York Eye and Ear Infirmary where he received his specialty training and later became a Board O.A.L.R. member.

Dr. Newell moved to Henderson, North Carolina and entered into the specialty practice of Eye, Ear, Nose and Throat. He was, at this time in the National Guard, and, for 25 years, served on the Governor's Staff. He re-entered the United States Army during World War II and was Post Surgeon at Fort McPherson, Georgia. He was retired in 1945 and returned to his practice in Henderson.

Dr. Newell served as chairman of the Henderson City School Board for 25 years. He was a charter member of the Henderson Rotary Club and has held every office in the local post of the American Legion and the Forty and Eight. Dr. Newell was a past master of Henderson Masonic Lodge No. 299, and was a past commander and high priest of the Henderson York Rite Bodies and a member of Sudan Temple of the Shrine.

Under Dr. Newell's leadership, Maria Parham Hospital was built and later enlarged. He was medical director and manager of the hospital for 25 years, until called into active duty in World War II.

For 50 years, Dr. Newell was a practicing physician in this state and in May, 1956, was awarded the Fifty Year Service Award of the Medical Society of North Carolina. He was a member of the Vance County Medical Society, the Southern Medical Association, and the American Medical Association. For 20 years he was a surgeon for the Seaboard Airline Railroad.

Dr. Newell had long been a member of the First

Baptist Church of Henderson and served as a deacon of that church.

Dr. Newell founded the Acca Hosiery Mill and the Acca Hosiery Finishing Mill in Henderson and operated both of these mills until his death.

Dr. Newell expired in Raleigh on Friday, November 2, 1956, following a six months illness due to carcinoma of the pharynx. He is survived by his wife, Mrs. Mary Hayes Newell; three daughters, Dr. Josephine E. Newell of Bailey; Mrs. Suzan Newell Clark of Arlington, Virginia, and Mrs. Jane Newell Zodun, of Henderson; one brother, Dr. John O. Newell, of Franklinton, and three grandsons.

Joseph Clark Holloway, M.D.

Dr. Joseph Clark Holloway, the son of Joseph Alexander Holloway and Mozelle Hicks Holloway, was born and reared in Durham County. He received his early education in the county schools, and entered the University of North Carolina in the fall of 1921. He took premedical courses there for two years, and entered the medical school in 1923. He took his last two years at the University of Tulane Medical School and graduated in 1927. Following this he took an internship at St. Vincent's Hospital in Norfolk, Virginia. In 1928 he returned to Durham and began the practice of medicine. He did general practice in Durham until his death on October 24, 1956.

He was a member of the staff of Watts Hospital and of the Durham-Orange Medical Society. He was a member of the Duke Memorial Methodist Church, Durham Masonic Lodge No. 210 and the Sudan Temple of the Shrine.

On March 31, 1933, he married Miss Jewel Martin of Bowling Green, Kentucky. He is survived by his wife and two children, Miss Joanna Holloway, a sophomore at Duke University, and one son, Joseph C. Holloway, Jr., a junior at Durham High School.

As has been stated, Joseph Clark Holloway came to Durham to practice medicine in 1928. Durham was home to him. He knew everybody and everybody knew him. He was a kindly person and everyone liked him. He did general practice here in Durham and in the surrounding community.

He liked to be paid for what he did, but that was not the most important thing. I expect that if the record was written, it would show that he gave a tremendous amount of his service without remuneration.

He practiced good medicine, and had the uncanny ability to arrive often at the correct, but difficult diagnosis. He lived a useful life and helped many people. He was many things to many people, and most of them good, but to me he was my friend and this word is used in its finest sense.

—W. R. Stanford, M. D.

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*Bradshaw, Mrs. Howard H., 2837 Reynolds Road	Winston-Salem
*Bradsher, Mrs. Arthur B., 421 Carolina Circle	Durham
*Bradsher, Mrs. J. Donald, 411 S. Main Street	Roxboro
Brady, Mrs. W. Mike	Morehead City
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Brandon, Mrs. Henry A.	Yadkinville
*Brandon, Mrs. James R., 1708 Chestnut Street	Wilmington
Brantley, Mrs. Julian T., 1500 Independence Road	Greensboro
*Brantly, Mrs. Clayton, 415 Carolina Circle	Durham
Brashear, Mrs. H. Robert, 8 Glemington Road	Glen Leano, Chapel Hill
Bream, Mrs. Charles A., 211 McCauley Street	Chapel Hill
Breeden, Mrs. William H., 1524 Morganton Road	Fayetteville
Brenizer, Mrs. Addison G., Jr., 1301 Providence Road	Charlotte
*Brewer, Mrs. J. Street	Roseboro
Brewton, Mrs. W. Allan, Lake Drive	Asheville
Brian, Mrs. Earl W., 2111 Whiteoak Road	Raleigh
*Bridger, Mrs. Dewey H.	Bladenboro
Briggs, Mrs. H. Harry, 323 Vanderbilt Road	Asheville
Brigman, Mrs. Paul H., 1311-A Eaton Place	High Point
*Brinkhous, Mrs. Kenneth M., 524 Dogwood Avenue	Chapel Hill
*Brinn, Mrs. Thomas P., 19 Front Street	Hertford
*Bristow, Mrs. Charles O., 594 Fayetteville Road	Rockingham
Britt, Mrs. J. Norman, E. 10th Street	Lumberton
Britt, Mrs. Tilman C., Jr.	Mt. Airy
Britton, Mrs. John D.	Canton
Brockmann, Mrs. Harry L., 912 Fairway Drive	High Point
Brooks, Mrs. E. Bruce, 522 Stratford Road	Winston-Salem
Brooks, Mrs. Frederick P., 431 W. 5th Street	Greenville
Brooks, Mrs. Ralph E., 1303 Rainey Street	Burlington
Brooks, Mrs. W. Lester, Jr., 2110 Queens Road, W.	Charlotte
Broughton, Mrs. Arthur C., Jr., 3008 Eton Road	Raleigh
Broun, Mrs. Matthew S., 606 Roanoke Avenue	Roanoke Rapids
Brouse, Mrs. Ivan E., Masonboro Sound	Wilmington
Brown, Mrs. Allan R.	Waynesville
Brown, Mrs. Charles W., 227 Fenton Place	Charlotte
Brown, Mrs. Clarence E., Box 96	Fairfax
Brown, Mrs. Douglas, 60 Terrace Road	Asheville
Brown, Mrs. Frank R., 1103 Country Club Drive	Greensboro
Brown, Mrs. George	Waynesville
Brown, Mrs. Gerald J.	Westfield
*Brown, Mrs. Ivan W., Jr., 1709 Vista Drive	Durham
Brown, Mrs. James A.	Cleveland
Brown, Mrs. James S., Sr., Willow Road	Hendersonville
*Brown, Mrs. James W., Jr., 873 Arbor Lane	Concord
Brown, Mrs. Kermit E., Chunns Cove Road	Asheville
Brown, Mrs. Landis G.	Southport
Brown, Mrs. Victor E.	Williamston
Brown, Mrs. William T., 1308 Pine Street	Laurinburg
Bruton, Mrs. Charles W.	Troy
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Bryan, Mrs. Thomas R., Jr., Sink Apartments	N. Wilkesboro
Buffaloe, Mrs. William J., State Hospital	Raleigh
Bugg, Mrs. Everett I., Jr., 1544 Hermitage Court	Durham
Buie, Mrs. Roderick M., Sr., 119 Kennington Road	Greensboro
Buie, Mrs. Roderick M., Jr., 3405 Madison Avenue	Greensboro
*Bulla, Mrs. Alexander C., 1709 Colonial Road	Raleigh
*Bullard, Mrs. George M., 209 Holt Street	Mebane
Bullock, Mrs. Duncan D., Sr.	Rowland
Bungarner, Mrs. James I.	Millers Creek
Bunce, Mrs. Paul L., Route 3	Chapel Hill
Bundy, Mrs. James, 433 McRae Drive	Fayetteville
Bundy, Mrs. William L., Finley Park	N. Wilkesboro
Bunn, Mrs. David G., 107 Thompson Street	Whiteville
Bunn, Mrs. Richard W., 411 Plymouth	Winston-Salem
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Burt, Mrs. Richard L., 501 Lester Lane	Winston-Salem	Chandler, Mrs. James B., VA Hospital	Fayetteville
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Busby, Mrs. Julian, West C. Street	Kannapolis	Chapman, Mrs. Edwin J., 264 Lakeshore Drive	Asheville
Busby, Mrs. Trent, 530 Confederate Avenue	Salisbury	Chapman, Mrs. Jesse P., 81 Sheridan Road	Asheville
Busse, Mrs. Ewald W., 1423 Woodburn Road	Durham	*Charlton, Mrs. John B., 911 Hill Street	Greensboro
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Byerly, Mrs. Wesley Grimes, 211 Highland Avenue	Lenoir	Chesson, Mrs. Arthur S., Jr., 400 S. Andrews Avenue	Goldshoro
Byrd, Mrs. Charles W., 409 S. Orange Avenue	Dunn	Chidester, Mrs. Augustus B., Haywood Forest	Hendersonville
Byrd, Mrs. William C., State Hospital	Morganton	Choate, Mrs. Allyn B., 1901 Providence Road	Charlotte
Byrnes, Mrs. Thomas H., 919 Mt. Vernon Avenue	Charlotte	Choate, Mrs. J. Walter, 146 Circle Drive	Salisbury
Byrum, Mrs. Clifford C., 2616 Wells Avenue	Raleigh	Christian, Mrs. B. Joseph, 2906 Dellwood Drive	Greensboro
Caddell, Mrs. H. Morris, 339 S. Chestnut Street	Aberdeen	Citron, Mrs. David S., 2100 Cumberland Avenue	Charlotte
Cain, Mrs. Frank C., Jr., 432 N. Edgemont	Gastonia	Clark, Mrs. Badie T., 607 Raleigh Road	Wilson
Calder, Mrs. Duncan G., Jr., 42 N. Union Street	Concord	Clark, Mrs. DeWitt D.	Clarkton
Caldwell, Mrs. E. Robert Jr., 116 N. Race Street	Statesville	*Clark, Mrs. Douglas H., Charles Street	Lumberton
Caldwell, Mrs. Jesse, Jr., 1307 Park Lane	Gastonia	Clark, Mrs. Harold S., 9 Lakewood Drive	Asheville
Caldwell, Mrs. Lawrence M., 406 S. College Avenue	Newton	Clark, Mrs. Milton S., 1110 East Mulberry Street	Goldshoro
Caldwell, Mrs. Robert M.	Mt. Airy	Clark, Mrs. Patrick, 208 Cumberland	Asheville
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*Carpenter, Mrs. Coy C., Route 7	Winston-Salem	*Clayton, Mrs. Eugene C., 17 Street Charles Place	Asheville
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*Carr, Mrs. Chalmers R., 1715 Queens Road	Charlotte	*Cleek, Mrs. Thornton R., 608 E. Kivett Street	Asheboro
Carr, Mrs. Edward S., Route 3	Sedgefield	Cline, Mrs. Wayne A., 909 W. Henderson Street	Salisbury
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Carroll, Mrs. Fountain W.	Hookerton	Cloninger, Mrs. Kenneth L., Westlake Hills	Newton 2
Carson, Mrs. Jack O.	Grifton	*Clutts, Mrs. G. Robert, 410 W. Bessemer	Greensboro
Carter, Mrs. F. Bayard, 2111 Myrtle Drive	Durham	Cobb, Mrs. Donnell B., 211 W. Ashe Street	Goldshoro
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Cathell, Mrs. James L., State Hospital	Butner	Cochcroft, Mrs. R. L., 217 Washington Avenue	Bessemer City
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Coffey, Mrs. James C., Pine Tree Road	Salisbury
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Cole, Mrs. Walter F.	Bunn
Coleman, Mrs. Lester L.	Hildebran
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Cooke, Mrs. Grady C.	Morehead City
Cooke, Mrs. H. Marcus	Boone
*Cooke, Mrs. Quinton E., 212 E. High Street	Murfreesboro
Cooke, Mrs. Ralph M.	Elkin
*Cooley, Mrs. Samuel S.	Black Mountain
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Cooper, Mrs. George M., Jr., 2322 Lyon Street	Raleigh
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Corbett, Mrs. James P.	Swansboro
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Corpening, Mrs. William N.	Granite Falls
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*Covington, Mrs. Furman P.	Thomasville
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Covington, Mrs. M. Cade, 2019 Lee Avenue	Sanford
Cox, Mrs. Alexander M.	Madison
Cox, Mrs. Samuel C., 8 E. Bayshore Boulevard	Jacksonville
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*Cozart, Mrs. Wiley H.	Fuquay Springs
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Crane, Mrs. George W., Jr., 2618 Augusta Drive	Durham
Craven, Mrs. Frederick T., Ravine Avenue	Concord
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Crawford, Mrs. William J., 1500 E. Ash Street	Goldsboro
*Creadick, Mrs. Robert N., 1200 Anderson Street	Durham
Credle, Mrs. Carroll S., Memorial Drive	Ahoskie
Creech, Mrs. Lemuel Underwood, 202 Edgedale Drive	High Point
Creed, Mrs. George O., Anson Avenue	Laurinburg
Cresenzo, Mrs. Victor M.	Reidsville
Crisp, Mrs. Sellers M., 1200 E. 5th Street	Greenville
*Crissman, Mrs. Clinton S., 326 Albright Avenue	Graham
Cromartie, Mrs. William J., 511 East Rosemary Street	Chapel Hill
Croom, Mrs. Arthur B., 1102 Greenway Drive	High Point
*Croom, Mrs. Robert D., Jr.	Maxton
Crosby, Lewis P.	Reidsville
*Cross, Mrs. Almon R., 414 Hillcrest Drive	High Point
Cross, Mrs. Robert V., 920 Fairway	High Point
Crouch, Mrs. Auley M., Sr., 520 Dock Street	Wilmington
*Crouch, Mrs. Auley M., Jr., 604 Dock Street	Wilmington
Crouch, Mrs. Thomas D.	Stony Point
Crouch, Mrs. Walter L., 1211 S. Live Oak Parkway	Wilmington
*Crow, Mrs. Samuel L., 12 N. Kensington Road	Asheville
*Crowell, Mrs. James A., 1529 E. Morehead Street	Charlotte
Crowell, Mrs. Lester Avant, Jr., 413 S. Aspen Street	Lincolnton
*Crump, Mrs. G. Curtis, Deva Glen Road	Asheville
Crumpler, Mrs. Amos Gilmore	Fuquay Springs
Crumpler, Mrs. J. Fulton, West Haven Boulevard	Rocky Mount
Crumpler, Mrs. Paul, 401 LaFayette Street	Clinton
Crumpler, Mrs. Warren H., N. Johnson Street	Mt. Olive
Crutchfield, Mrs. Andrew J., 300 Plymouth	Winston-Salem
Cubberley, Mrs. Charles L., Jr., 505 LaFayette Drive	Wilson
*Culbreth, Mrs. George G., 4731 Wendover Lane	Charlotte
Cummings, Mrs. Michael P.	Reidsville
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Cutchin, Mrs. J. Henry, Jr.	Sherill's Ford
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*Dalton, Mrs. Bennie B.	Asheboro
*Dalton, Mrs. Horance M., Hardee Heights	Kinston
Dalton, Mrs. William B., 4217 Henderson Road	Greensboro
Dameron, Mrs. Joseph T., 424 Henderson Avenue	Salisbury
*Dameron, Mrs. Thomas B., Jr., 2710 E. Rothgeb Drive	Raleigh

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Daniel, Mrs. Tom B., 909 Lake Boone Trail	Raleigh	Downs, Mrs. Kenneth R., 1933 E. 9th Street	Charlotte
*Daniel, Mrs. Walter E., 2115 Roswell Avenue	Charlotte	Doyle, Mrs. Owen W., 2511 LaFayette Avenue	Greensboro
Daniels, Mrs. Robert E., 23 Vance Crescent	Asheville	Drake, Mrs. Benjamin M., 2255 Circle Drive	Raleigh
Dauchtridge, Mrs. Arthur L., West Haven	Rocky Mount	Drake, Mrs. David E.	Selma
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Davenport, Mrs. Carlton A., Front Street	Hertford	Duckett, Mrs. Virgil H.	Canton
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Davidson, Mrs. James H., 2200 Sprunt Street	Durham	Dunn, Mrs. Richard B., 810 Dover Road	Greensboro
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*Davis, Mrs. David A., Kings Hill Road	Chapel Hill	*Durham, Mrs. Carey W., 209 W. Ridgeway Drive	Greensboro
Davis, Mrs. Grayson	Hope Mills	Eagle, Mrs. James C., 418 Carolina Avenue	Spencer
Davis, Mrs. Jack B.	Waynesville	*Eagles, Mrs. Archie Y., Pembroke Avenue	Ahaskie
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Davis, Mrs. John W., Rt. 5, Box 709	Hickory	*Eastwood, Mrs. Frederick T., 2726 Rothgeb Drive	Raleigh
Davis, Mrs. Joseph F., Reidsville Rd., Route 5	Greensboro	Eckbert, Mrs. William F., 137 Eighth Avenue	Cramerton
Davis, Mrs. Philip B., 807 Florham Avenue	High Point	Edgerton, Mrs. Glenn S., 325 Cherokee Place	Charlotte
*Davis, Mrs. Richard B., New Garden Road	Greensboro	Egerton, Mrs. Courtney D., 1612 Oberlin Road	Raleigh
Davis, Mrs. Rufus J., Lakewood	Cramerton	Eldridge, Mrs. Charles P., 1621 St. Mary's Street	Raleigh
Davis, Mrs. William H., Jr., 723 N. Stratford Road	Winston-Salem	Elfmom, Mrs. Samuel L., 117 Stedman Street	Fayetteville
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*DeCamp, Mrs. A. Lenyard, 1830 Cassamia Place	Charlotte	Elliot, Mrs. William Forrest, 828 S. Aspen Street	Lincolnton
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Dees, Mrs. John T.	Burgaw	*Elliott, Mrs. Joseph A., Sr., 2700 Sherwood Avenue	Charlotte
Dennis, Mrs. Robert G.	Blowing Rock	Elliott, Mrs. Joseph A., Jr., 1860 Lynwood Drive	Charlotte
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Dick, Mrs. Macdonald, 3005 Norwich, Hope Valley	Durham	Erdman, Mrs. Lawrence H.	New Bern
Dickerson, Mrs. A. Jackson	Waynesville	Ernst, Mrs. H. Edward, Ingleside Drive	Concord
Dickie, Mrs. James W., 3003 Wayne Drive	Wilmington	Ervin, Mrs. John W., Lenoir Street	Morganton
Dickinson, Mrs. Kenneth D., 1316 Canterbury Road	Raleigh	Erwin, Mrs. Evan A., Sr., 516 S. Main Street	Laurinburg
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*Dickson, Mrs. Malcolm S., 1903 Woodland Avenue	Burlington	Espey, Mrs. Dan, Jr., WNC Sanatorium	Black Mountain
*Dixon, Mrs. G. Grady, 503 Snow Hill Street	Ayden	Estes, Mrs. E. Harvey, Jr., 8 Meadowbrook Road	Durham
Dixon, Mrs. Philip L., Jr., 1 Bayshore Boulevard E.	Jacksonville	Estes, Mrs. Marion M., 2812 O'Berry Street	Raleigh
*Doffermire, Mrs. L. Randolph, W. Harnett Street	Dunn	Etherington, Mrs. John L., 1112 Park Avenue B.	Goldsboro
Donner, Mrs. Paul G., 2201 Creacent Avenue Extension	Charlotte	Evans, Mrs. Donald	Clinton
Donovan, Mrs. Daniel L., Route 2	Chapel Hill	Evans, Mrs. John E., 2923 Hydrangea Place	Wilmington
*Dorenbusch, Mrs. Alfred A., 2734 Hampton Avenue	Charlotte	Faison, Mrs. Elias S., 1825 Providence Road	Charlotte
Dorman, Mrs. Bruce H., 3915 Winston Boulevard	Wilmington		
Dosher, Mrs. William S., Wrightsville Beach	Wilmington		

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*Farley, Mrs. William W., 2625 Dover Road	Raleigh	Ford, Mrs. Blanchard Fred	Maxton
Farmer, Mrs. Thomas W., Mason Farm Road	Chapel Hill	Ford, Mrs. David E., 103 Bridge Street	Washington
Farmer, Mrs. William A., 2841 Skye Drive	Fayetteville	Forsyth, Mrs. H. Francis, 434 Westview Drive	Winston-Salem
Farmer, Mrs. William D., 1011 Country Club Drive	Greensboro	Fortescue, Mrs. W. Nicholas, Kanuga Road	Hendersonville
Farmer, Mrs. Woodard E., 35 Finalee Street	Asheville	Fortney, Mrs. Austin P.,	Jamestown
Farthing, Mrs. J. Watts, 2930 Park Avenue	Wilmington	Fortune, Mrs. Benjamin F., 906 Cornwallis Drive	Greensboro
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Feldman, Mrs. Leon H., 6 N. Kensington Road	Asheville	Foster, Mrs. Howitt H.	Norlina
Felton, Mrs. Robert L., Jr., Box 176	Carthage	Foster, Mrs. John F., 309 N. Gulf Street	Sanford
Felts, Mrs. John H., Jr., 245 New Drive	Winston-Salem	Foster, Mrs. John W., 294 West End Boulevard	Winston-Salem
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*Ferguson, Mrs. George B., 3938 Dover Road, Hope Valley	Durham	Foushee, Mrs. John C.	Windsor
Ferneyhough, Mrs. William T.	Reidsville	*Fowle, Mrs. Willis H. III	Asheboro
*Ferrell, Mrs. John A., Carolina Hotel	Raleigh	Fowler, Mrs. H. Jack, Box 403	Walnut Cove
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Fetner, Mrs. Lawrence Merrill, 228 Norwood Street	Lenoir	*Fox, Mrs. William M., 420 Holly Lane	Fayetteville
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Fike, Mrs. Ralph L., Raleigh Road	Wilson	Freedman, Mrs. Arthur, Rt. 9, Hobbs Road	Greensboro
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Fish, Mrs. Harry G., Long Avenue	Rocky Mount	Freeman, Mrs. Roy O.	Jefferson
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Fitzgerald, Mrs. John Dean, 210 Crestwood Drive	Roxboro	Fresh, Mrs. W. M., 630 First Avenue	Hickory
Fitzgerald, Mrs. John Hill, Jr., 217 Buff Street	Lincolnton	Frierson, Mrs. John H., Jr., LaFayette Avenue	Rocky Mount
Fitzgerald, Mrs. Robert Greeson, 518 Reams Avenue	Roxboro	*Fritz, Mrs. Jacob L.	Asheboro
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Fleetwood, Mrs. Joe A., Jr.	Conway	Fritz, Mrs. William A., 124 N. Center Street	Hickory
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*Fleming, Mrs. Major I., 104 S. Franklin	Rocky Mount	Frye, Mrs. Glenn R., 539 N. Center Street	Hickory
*Fleming, Mrs. Ralph G., 1507 Oakland Avenue	Durham	Fulcher, Mrs. Luther	Beaufort
Fleming, Mrs. Samuel W.	Elm City	Fuller, Mrs. H. Fleming, 1302 Walker Drive	Kinston
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*Floyd, Mrs. Anderson G., 201 E. College Street	Whiteville	Furgurson, Mrs. Ernest W.	Plymouth
Floyd, Mrs. Hal S.	Fairmont	Futrell, Mrs. John M., Westbridge Road	Greensboro
*Floyd, Mrs. W. Russel, Mt. Pleasant Highway	Concord	Futrell, Mrs. Lokie M., 100 E. High Street	Murfreesboro
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Fogleman, Mrs. Ross Lee, Rhodes Avenue	Kinston	Gallant, Mrs. R. Miller, 809 Central Avenue	Charlotte
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*Forbes, Mrs. Gus E.	Laurinburg	Gallup, Mrs. Charles H., 3104 Darien Drive	Raleigh
		Gamble, Mrs. John Reeves, Sr., 504 E. Main Street	Lincolnton
		Garber Mrs. Edgar C., Jr., 505 Rush Road	Fayetteville
		*Gardner, Mrs. Clarence E., Jr.	Hillsboro

- *Garrard, Mrs. Robert L., 101 N. Park Drive Greensboro
- Garrenton, Mrs. Connell G. Bethel
- Garrett, Mrs. John B. Wailertown
- *Garrett, Mrs. Norman H., Jr., 3932 Madison Avenue Greensboro
- *Garrison, Mrs. Ralph B., Cheraw Road Hamlet
- Garrison, Mrs. Robert L., 227 Queens Road Charlotte
- *Garvey, Mrs. Fred K., 440 Fairfax Drive Winston-Salem
- Garvey, Mrs. Robert Blowing Rock
- *Gaul, Mrs. John S., Sr., 2119 Norton Road Charlotte
- Gaul, Mrs. John S., Jr., 2010 Sharon Lane Charlotte
- Gay, Mrs. Charles H., 143 Huntley Place Charlotte
- Geddie, Mrs. Kenneth B., 121 Rotary Drive High Point
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- *Gentry, Mrs. William H. McCain
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- Gibbon, Mrs. James W., 720 Bromley Road Charlotte
- Gibbons, Mrs. Julius J., Jr., Highland Avenue Lenoir
- Gibbs, Mrs. N. M. New Bern
- Gibbs, Mrs. Robert L., 15 Chiles Avenue Asheville
- *Gibbs, Mrs. Stuart W., 210 Oakdale Gastonia
- Gibson, Mrs. Francis D., Jr. Fairmont
- Gibson, Mrs. Laurence O., 715 N. Center Street Statesville
- Gibson, Mrs. Milton R., 105 Chamberlain Street Raleigh
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- Gilmore, Mrs. Clyde M., 108 E. Avondale Greensboro
- Gilmour, Mrs. Monroe T., 934 Granville Road Charlotte
- Glasgow, Mrs. Douglas McK., 2822 Glendale Road Charlotte
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- Goodman, Mrs. Benjamin W., 226 Fifth Street, S.E. Hichory
- Goodwin, Mrs. Cleon W., 1107 W. Nash Street Wilson
- Goodwin, Mrs. Oscar S. Apex
- *Gordon, Mrs. John S., Rt., 1 Matthews
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- Grady, Mrs. L. V., 1529 W. Nash Street Wilson
- *Graham, Mrs. Charles P., 123 Forest Hills Drive Wilmington
- Graham, Mrs. John B., Roosevelt Road Chapel Hill
- Graham, Mrs. Sam E. Williamston
- Graham, Mrs. Walter R., 741 Hempstead Place Charlotte
- Graham, Mrs. William A., 2247 Cranford Road Durham
- Gray, Mrs. Cyrus L., 912 Rotary Drive High Point
- Gray, Mrs. M. L., 607 Blaney Street Clinton
- Green, Mrs. Harold D., 1172 Hawthorne Road Winston-Salem
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- Griffin, Mrs. William Ray, Sr., 316 Vanderbilt Road Asheville
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- Grimsley, Mrs. William T. Guilford College
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- Gross, Mrs. Francis W., 408 W. Lexington Avenue High Point
- Gross, Mrs. Frank B., Jr., 228 Midland Drive Asheville
- Grove, Mrs. Raymond F., 12 Lagoon Place Wilmington
- Groves, Mrs. Robert B., Sr. Lowe
- Groves, Mrs. Robert B., Jr. Belmont
- *Gullingsrud, Mrs. Miles J. O. Leaksville
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*Highsmith, Mrs. George P.	Thomasville
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*Johnson, Mrs. J. Ralph, West Orange Avenue	Dunn
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*Johnson, Mrs. W. C.	Canton
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*Johnson, Mrs. Wingate M., 428 Stratford Road	Winston-Salem
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Kernodle, Mrs. John R., Edgewood Avenue Extension	Burlington
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Long, Mrs. T. Walter, N. Main Street	Newton
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McBee, Mrs. Paul T., 503 Claremont Avenue	Marion
McBride, Mrs. Donald, 2503 Ramsay Street	Fayetteville
McBryde, Mrs. Angus M., E. Forest Hills Boulevard	Durham
McCain, Mrs. Walkup K., 800 Sunset Drive	High Point
*McCain, Mrs. Paul P.	Red Springs
McCall, Mrs. W. Herbert, Country Club Road	Asheville
*McCarty, Mrs. R. Leever, 843 Hempstead Place	Charlotte
McClees, Mrs. E. C.	Em City
McClelland, Mrs. Joseph O.	Maxton
McConnell, Mrs. Harvey R., 1119 Cumberland	Gastonia
McCoy, Mrs. Joseph B., Jr., 2515 Crescent Avenue Extension	Charlotte
McCracken, Mrs. Joseph P., 126 Pinecrest Road	Durham
McCracken, Mrs. Marvin H., 28 Griffing Boulevard	Asheville
McCune, Mrs. William W., 3501 Seward Place	Charlotte
McDonald, Mrs. Angus M., 1830 Queens Road, W.	Charlotte
McDonald, Mrs. Lester B., Brevard Road	Hendersonville
McDowell, Mrs. Harold C., 200 Arbor Road	Winston-Salem
McDowell, Mrs. Roy H.	Belmont
McEachern, Mrs. Duncan R., 2915 Hydrangea Place	Wilmington
McElrath, Mrs. Percy J., 2736 Toxey Drive	Raleigh
McFadyen, Mrs. Oscar L., Jr., 524 Valley Road	Fayetteville
McGavran, Mrs. Edward G., Greenwood Road	Chapel Hill
McGee, Mrs. Julian M., 811 N. Elm Street	Greensboro
McGimsey, Mrs. James F., Jr., Edgewood Street	Morganton
*McGowan, Mrs. Clandius	Plymouth
*McGowan, Mrs. Joseph F., 303 Vanderbilt Road	Asheville
*McGrath, Mrs. Frank B., 212 E. 17th Street	Lumberton
McGuffin, Mrs. William C., 14 Normandy Road	Asheville
*McIntosh, Mrs. Archibald N.	Marion
McIver, Mrs. Lynn, 203 Summitt Avenue	Sanford
McKay, Mrs. Clinton H., 204 Wales Avenue	Charlotte
McKay, Mrs. Hamilton W., 2936 Belvedere Avenue	Charlotte
McKay, Mrs. John A., 312 Pinecrest Drive	Fayetteville
McKay, Mrs. Robert W., 444 Eastover Road	Charlotte

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*McKee, Mrs. Lewis M., 3633 Hope Valley Road	Durham	Martin, Mrs. Benjamin F., 2556 Warwick Road	Winston-Salem
McKeithan, Mrs. Murdock Ritchie	Laurinburg	Martin, Mrs. James A., Walnut Street	Lumberton
McKenzie, Mrs. B. Whitehead, 407 Mocksville Avenue	Salisbury	Martin, Mrs. James F., Roslyn Road	Winston-Salem
McKnight, Mrs. Roy B., 2343 Forest Drive	Charlotte	*Martin, Mrs. Moir S.,	Mt. Airy
McLamb, Mrs. George T., Forest Lake	Mebane	*Martin, Mrs. W. Francis, 1534 Queens Road, W.	Charlotte
McLaurin, Mrs. Daniel A.	Dobson	Mason, Mrs. Lockert B., 115 Colonial Drive	Wilmington
McLean, Mrs. A. A., 615 Woodridge Drive	Murfreesboro	Mason, Mrs. Manly	Newport
McLean, Mrs. E. Kenneth, 1110 Queens Road, W.	Charlotte	Massey, Mrs. Charles C., 1318 Carlton Avenue	Charlotte
McLean, Mrs. Harry H., III, 94 Vance Street	Roanoke Rapids	Matheson, Mrs. J. Gaddy, 420 N. Street	Ahoskie
McLean, Mrs. James W., 117 Devane Street	Fayetteville	*Matheson, Mrs. Robert A.	Laeford
McLeod, Mrs. John C., Jr., 707 Pou Street	Goldsboro	Matthews, Mrs. Robert W., 311 Meadowbrook Terrace	Greensboro
McLeod, Mrs. W. Leslie, 1504 Biltmore Drive	Charlotte	*Matthews, Mrs. Hugh A.	Canton
McMahon, Mrs. Francis J., 5 Evergreen Lane	Asheville	Matthews, Mrs. Roland D., 1529 Shadylawn Drive	Burlington
*McManus, Mrs. Hugh F., Jr., 3331 White Oak Road	Raleigh	Matthews, Mrs. Vann M., 3010 Central Avenue	Charlotte
McMillan, Mrs. Robert L., 718 Arbor Road	Winston-Salem	Matthews, Mrs. Wallace R., 8 Fairway Place	Asheville
*McMillan, Mrs. Robert M., Massachusetts Avenue Extension	Southern Pines	Matthews, Mrs. William C., 645 Hempstead Place	Charlotte
*McMillan, Mrs. Roscoe D.	Red Springs	Matthews, Mrs. William W.	Leaksville
*McNeill, Mrs. Claude A., Jr.	Elkin	Maulden, Mrs. Paul R., 208 William Street	Kannapolis
McNeill, Mrs. James H., Pilsen Street	N. Wilkesboro	Manzy, Mrs. C. Hampton, Jr., 1820 Greensboro Road	Winston-Salem
McNeil, Mrs. Thomas L.	Wilkesboro	Maxwell, Mrs. Clarence S.	Beaufort
McPheeters, Mrs. Samuel B., 307 Linwood Avenue	Goldsboro	*May, Mrs. Harvey C., 1136 Berkeley Avenue	Charlotte
*McPherson, Mrs. Charles W., 422 Fountain Place	Burlington	Mayer, Mrs. Walter B., 2828 St. Andrews Lane	Charlotte
McRae, Mrs. Marvin E., 121 Beverly Place	Greensboro	Meadows, Mrs. Joseph H., 108 Clyde Avenue	Wilson
McWhorter, Mrs. Robert L., 905 Martin Drive	Concord	Means, Mrs. Robert L., 122 Revere Road	Winston-Salem
Mabe, Mrs. Paul	Madison	Mease, Mrs. Willis E.	Richland
Macatee, Mrs. George Jr., Inglewood Road	Asheville	Mebane, Mrs. William C., Jr., 4507 Wrightsville Avenue	Wilmington
*Mackie, Mrs. George C.	Wake Forest	*Mees, Mrs. Theo H., Country Club Road	Lumberton
Macon, Mrs. Gideon H.	Warrenton	Menefee, Mrs. Elijah E., Jr., 2205 Cranford Road	Durham
Maddrey, Mrs. M. Crocker, 610 Franklin Street	Roanoke Rapids	Merritt, Mrs. Fred L.	Columbia
Major, Mrs. Richard S., 816 Fourth Avenue W.	Hendersonville	Merritt, Mrs. J. Frederic, 1615 S. College Park Drive	Greensboro
Maloney, Mrs. George R., RFD #6	Fayetteville	Merritt, Mrs. John H., Barnett Avenue	Roxboro
*Maness, Mrs. A. Kelly, 1918 Granville Road	Greensboro	Meschan, Mrs. I., 651 Roslyn Road	Winston-Salem
Maness, Mrs. Paul F., 1010 Central Avenue	Burlington	Messerschmidt, Mrs. H. Carl, Jr., Hillcrest Manor Apartments	High Point
Mangum, Mrs. Carlyle T., Jr.	Leaksville	Metcalfe, Mrs. Lawrence E., Chunns Cove Road	Asheville
Mangus, Mrs. Julian E.	Leaksville	Mewborn, Mrs. John M.	Farmville
Manly, Mrs. Isaac V., 2215 Lakeview Drive	Raleigh	Meyer, Mrs. George J.	Archdale
*Manly, Mrs. James H., Jr., 2100 St. James	Raleigh	Milham, Mrs. Claude G., 405 Minturn Avenue	Hamlet
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Marks, Mrs. Edgar, S., 612 Cornwallis Road	Greensboro	Miller, Mrs. Henry R., Eastwood Road	Swannanoa
Marlowe, Mrs. William A.	Walstonburg	*Miller, Mrs. Horace W., 301 Valley Road	Fayetteville
*Marr, Mrs. James T., 1718 Virginia Road	Winston-Salem	*Miller, Mrs. I. Ben, 1007 Westwood	High Point
Marsh, Mrs. Frank B., 725 Lake Drive	Salisbury	Miller, Mrs. Joseph T., 1703 Poston Circle	Gastonia
Marshall, Mrs. James F., 645 Arbor Road	Winston-Salem	Miller, Mrs. Oscar L., 314 Fenton Place	Charlotte

- *Miller, Mrs. Robert C., 414 Harvie Street Gastonia
- Miller, Mrs. Robert Evans, 1100 Bolling Road Charlotte
- Miller, Mrs. Robert P., 1223 Providence Road Charlotte
- Miller, Mrs. Walton H., Jr., 1606 E. Mulberry Street Goldsboro
- Miller, Mrs. Warren E., 502 Pinkney Street Whiteville
- Milliken, Mrs. James S., Box 55 Southern Pines
- Millman, Mrs. Theodore H. Spray
- Millns, Mrs. Dale T. New Bern
- Mills, Mrs. Charles R., 100 Elmwood Drive Greensboro
- Mills, Mrs. James C., J Street North Wilkesboro
- Mills, Mrs. Randolph D., 231 Zollicoffer Avenue Henderson
- Mills, Mrs. Wardell H., 1202 Country Club Drive Greensboro
- Minges, Mrs. Ray D., W. Wright Road Greenville
- Misenheimer, Mrs. Edd A., Washington Lane Concord
- Mitchell, Mrs. George W., 807 W. Kenan Street Wilson
- Mitchell, Mrs. Roy C. Mt. Airy
- Mitchener, Mrs. James Samuel, Jr. Laurinburg
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- *Mock, Mrs. Frank L. Lexington 3
- Moffett, Mrs. Alexander S., Box 72 Taylorsville
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- Monroe, Mrs. D. Geddie, 204 Churchill Drive Fayetteville
- Monroe, Mrs. Lance T., 218 N. Union Street Concord
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- Montgomery, Mrs. Wayne S., 10 Blackwood Road Asheville
- Montgomery, Mrs. William G., Box 68 Granite Quarry
- Moody, Mrs. W. A. Bethel
- Moore, Mrs. Allen H. Washington
- Moore, Mrs. D. Forrest, Box 136 Shelby
- Moore, Mrs. Davis L., 503 E. 5th Street Greenville
- Moore, Mrs. Henry B., Main Street Graham
- Moore, Mrs. Horace G., Jr., 125 Wayne Drive Wilmington
- *Moore, Mrs. James L., 2513 Colton Place Raleigh
- Moore, Mrs. John A., 308 E. Hendrix Street Greensboro
- Moore, Mrs. Julian A., 34 Hilltop Road Asheville
- Moore, Mrs. Kinchen C., Prince Street Laurinburg
- Moore, Mrs. Laurie W. Beaufort
- Moore, Mrs. Pierce J., Jr., Mt. Sanatorium Fletcher
- *Moore, Mrs. Robert A., 2415 Warwick Road Winston-Salem
- *Moore, Mrs. Robert Ashe, 1734 Queens Road, W. Charlotte
- Moore, Mrs. Robert L., 311 W. Washington Street Bessemer City
- Moore, Mrs. Roy H. Canton
- Moore, Mrs. W. Donald Coats
- Moorefield, Mrs. Robert H., East C Street Kannapolis
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- Morgan, Mrs. Charles H., 1408 S. York Street Gastonia
- Morgan, Mrs. Grady A., 1 Cambridge Road Asheville
- Moriele, Mrs. C. Hunter Reidsville
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- Morris, Mrs. John W. Morehead City
- *Morris, Mrs. Leslie M., 1122 Edgemont Gastonia
- Morris, Mrs. Marshall G., Jr., 404 S. Mendanhall Greensboro
- Morris, Mrs. Rae H., 67 Louise Avenue Concord
- Morrison, Mrs. Robert H., 911 Brook Street Fayetteville
- Morrison, Mrs. Roger W., 65 Sunset Parkway Asheville
- Morton, Mrs. L. Thomas, 513 S. Cedar Street Lincolnton
- Mullen, Mrs. Malcolm P., State Hospital Morganton
- *Mumford, Mrs. Ander M. Winterville
- Murchison, Mrs. David R., 315 S. Third Street Wilmington
- Murdaugh, Mrs. Herschel Victor, Louise Circle, Poplar Apts. Durham
- Murdoch, Mrs. James W., State Hospital Butner
- *Murphy, Mrs. G. Westbrook, 22 Hampstead Road Asheville
- *Murphy, Mrs. Thomas L., 1020 Highland Avenue Salisbury
- *Murray, Mrs. Robert L. Raeford
- Murray, Mrs. William G., 1505 Independence Road Greensboro
- *Myers, Mrs. Richard T., 600 Buena Vista Circle Winston-Salem
- Nailling, Mrs. Richard C., 85 St. Dunstons Road Asheville
- *Nance, Mrs. Charles Lee, 1825 E. 7th Street Charlotte
- Nance, Mrs. F. Lee, Jr., 402 S. Main Street Kannapolis
- Nance, Mrs. John W., Powell Street Clinton
- Nanzetta, Mrs. Leonard, 2356 Rosewood Avenue Winston-Salem
- Nash, Mrs. Thomas P., III, 306 E. Colonial Elizabeth City
- *Naumoff, Mrs. Philip, 2320 Croydon Road Charlotte
- Neal, Mrs. J. Walter, 1344 Brooks Avenue Raleigh
- *Neal, Mrs. R. Douglas, 2532 Hampton Avenue Charlotte
- Neblett, Mrs. Herbert C., 1111 Granville Road Charlotte
- Neeland, Mrs. Eugene C., 1111 N. Bynum Street Wilson
- Neese, Mrs. Kenneth E., 611 Lancaster Avenue Monroe
- *Nelson, Mrs. William H., Cooper Drive Clinton
- Netsky, Mrs. Martin G., 1030 Reynolds Court Winston-Salem
- Neville, Mrs. Cecil H. Scotland Neck

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Newell, Mrs. Leon B., 921 Berkeley Avenue	Charlotte	Oliver, Mrs. Joseph A.	Rockwell
*Newman, Mrs. Glenn C., Lafayette Street	Clinton	O'Quinn, Mrs. E. N., 1810 Princess Street	Wilmington
Newman, Mrs. Harold H., Jr., Oak Road	Salisbury	Orgain, Mrs. Edward S., 3321 Devon Road, Hope Valley	Durham
Newsome, Mrs. Henry C.	Pilot Mountain	Ormand, Mrs. John W.	Monroe
Newton, Mrs. Lowell, 244 Hempstead Place	Charlotte	Ormond, Mrs. Allison L., 108 Sixth Avenue, N. E.	Hickory
Newton, Mrs. William K., Finley Park	North Wilkesboro	Orr, Mrs. Charles C., 179 Montford	Asheville
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*Nichols, Mrs. Robert J., 307 Carolina Circle	Winston-Salem	Owen, Mrs. G. Frank, Jr., 222 W. Trinity Avenue	Durham
Nichols, Mrs. Thomas R., 306 W. Union Street	Morganton	Owen, Mrs. John F., 2631 Fairview Road	Raleigh
Nicholson, Mrs. Robert W., 809 Windsor Drive	Wilmington	Owen, Mrs. Robert H.	Canton
*Nicholson, Mrs. William McN., 824 Anderson Street	Durham	Owen, Mrs. W. Boyd	Waynesville
*Nicol, Mrs. William F., Box 637	Carthage	*Owens, Mrs. Francis L.	Pinehurst
Nifong, Mrs. Frank M.	Clemmons	*Owens, Mrs. Zack D., 407 W. Church Street	Elizabeth City
Noble, Mrs. Robert P., 1612 Craig Street	Raleigh	*Owsley, Mrs. Lawrence H., Highland Park	Boone
*Noel, Mrs. George T., 312 West Avenue	Kannapolis	*Pace, Mrs. Karl B., 404 Summit Street	Greenville
Noel, Mrs. William W.	Henderson	Pace, Mrs. Samuel E., 1617 Market Street	Wilmington
Nolan, Mrs. James O., Cannon Boulevard	Kannapolis	Padgett, Mrs. Philip G., 605 N. Piedmont	Kings Mountain
Nolan, Mrs. Paul V., 304 S. Sims Street	Kings Mountain	Page, Mrs. Ernest B., Jr., 129 Woodburn Road	Raleigh
*Norfleet, Mrs. Charles M., Jr., 2600 Warwick Road	Winston-Salem	Page, Mrs. George D., 1855 Cassamia Place	Charlotte
Norment, Mrs. William B., 702 Woodland Drive	Greensboro	Painter, Mrs. W. Watson, 920 N. Main Street	Mooreville
Norris, Mrs. Charles B., 1039 Arosa Avenue	Charlotte	Palmer, Mrs. Yates S.	Valdese
North, Mrs. Edward H., Jr., Riverview Crescent	Elizabeth City	Palmes, Mrs. Wesley C., Jr., 440 Rigeway Avenue	Statesville
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Norville, Mrs. William L., 321 Trade Street	Burlington	Parham, Mrs. Asa R., 712 Hillcrest Drive	High Point
Nowell, Mrs. S. C., 2nd Avenue Place, N.W.	Hickory	Parker, Mrs. John Wesley, Jr.	Seaboard
Nowlan, Mrs. Fagg B.	Pleasant Garden	Parker, Mrs. Joseph B., Jr., 2713 Dogwood Road	Durham
*Nowlin, Mrs. G. Preston, 946 Bromley Road	Charlotte	Parker, Mrs. Oscar L., 706 College Street	Clinton
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Odom, Mrs. Robert E., 99 Evelyn Place	Asheville	Parker, Mrs. Prentiss E., Jr.	Boonesville
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Oelrich, Mrs. August M., 613 Palmer Drive	Sanford	Parker, Mrs. Samuel L., Jr., 1202 Harding Avenue	Kinston
Offutt, Mrs. Vernon D., Rountree Street	Kinston	Parker, Mrs. Wade T., 717 Hay Street	Fayetteville
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Ogburn, Mrs. Leon N., 305 W. Park Drive	Raleigh	Parks, Mrs. W. Craig, Emerywood Estates	High Point
Ogburn, Mrs. Lundie C., 1714 Virginia Road	Winston-Salem	*Parrott, Mrs. Frank S., 322 Mocksville Avenue	Salisbury
Ogburn, Mrs. Paul L., 102 N. Patterson Street	Statesville	*Parsons, Mrs. Lacy J., 2404 Rowland Avenue	Lumberton
Ogle, Mrs. Ben C., 947 St. Mary's Street	Raleigh	Parsons, Mrs. William H.	Ellerbe
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*Oliver, Mrs. James E.	Bryson City	Pate, Mrs. Archibald H., 110 S. Oelander Avenue	Goldsboro

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*Patterson, Mrs. Carl N., 3930 Plymouth Rd., Hope Valley	Durham	Pipes, Mrs. David McK., 1 Fairmont Road	Asheville
*Patterson, Mrs. F. M. Simmons	New Bern	Pishko, Mrs. Michael T., Midland Road	Pinehurst
Patterson, Mrs. Fred G., 511 Senlac Road	Chapel Hill	*Pittman, Mrs. Alfred R., Jr., 2304 Rowland Avenue	Lumberton
Patterson, Mrs. Hubert C., Pittsboro Road	Chapel Hill	Pittman, Mrs. Dorn C., Alamance Acres	Burlington
Patterson, Mrs. Joseph H.	Broadway	Pittman, Mrs. Malory A., Raleigh Road	Wilson
Patterson, Mrs. William H., Jr., Terrace Place	Morganton	Pittman, Mrs. Raymond L., Sr., 645 Hay Street	Fayetteville
*Payne, Mrs. John A., III	Sunbury	Pittman, Mrs. William A., 118 Stedman Avenue	Fayetteville
Peak, Mrs. L. C., 409 Lafayette Street	Clinton	Pitts, Mrs. William R., 429 Eastover Road	Charlotte
Pearson, Mrs. Arthur A., Mt. Sanatorium	Fletcher	Piver, Mrs. James D., 202 East Bayshore	
Pearson, Mrs. Hugh O., Box 26	Pinetops	Piver, Mrs. William Crawford Jr., Washington Park	Washington
*Pearson, Mrs. John K.	Apex	Pixley, Mrs. Roland T., 1020 Habersham Drive	Charlotte
Peasley, Mrs. Edward D., 10 Westchester Drive	Asheville	Plonk, Mrs. George W., 2607 St. Mary's Street	Raleigh
*Peck, Mrs. Harold A., 425 Dogwood Lane	Southern Pines	Plyler, Mrs. Ralph J., 611 Mocksville Avenue	Salisbury
Peck, Mrs. William M.	McCain	Podger, Mrs. Kenneth A., 217 East Markham Avenue	Durham
Peedin, Mrs. James H., Box 248	Burgaw	Pool, Mrs. Bennett B., 2301 Buena Vista Road	Winston-Salem
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Peeler, Mrs. Forrest E.	Maiden	*Poole, Mrs. R. Frank, Jr., 1631 St. Mary's Street	Raleigh
Pegg, Mrs. Fred G., 1336 Kenwood Avenue	Winston-Salem	Pope, Mrs. Henry T., East 17th Street	Lumberton
Pender, Mrs. John R., 343-A Wakefield Drive	Charlotte	Pope, Mrs. Robert C., Monticello Drive	Wilson
Penick, Mrs. George D., 1 Penick Lane	Chapel Hill	Porter, Mrs. Richard A., Haywood Forest	Hendersonville
Pennington, Mrs. Glenn W., 2201 Hastings Drive	Charlotte	Poteat, Mrs. Hubert M., Jr., Church Street	Smithfield
Perrin, Mrs. Thomas S., 1767 Sterling Road	Charlotte	Pott, Mrs. Walter H., 314 Rutledge Road	Greenville
*Perry, Mrs. D. Russell, Jr., 746 Sylvan Road	Winston-Salem	*Powell, Mrs. Albert H., 1632 University Drive	Durham
*Perry, Mrs. David R.	Durham	Powell, Mrs. Charles J., 1128 Magnolia Place	Wilmington
Perry, Mrs. Glenn C., 702 Sunset Drive	High Point	Powell, Mrs. E. Charles, Jr., 804 East Park Avenue	Goldsboro
*Perry, Mrs. Henry B., Jr., 100 E. Brentwood	Greensboro	Powell, Mrs. Jack, 6 Violet Hill Circle	Asheville
Perry, Mrs. S. Paul, 3602 Rugby Rd., Hope Valley	Durham	Powell, Mrs. William F., 62 Gertrude Place	Asheville
Perryman, Mrs. Olin C., Jr., 105 E. Clemmonsville Road	Winston-Salem	Powers, Mrs. Earl J., 2660 Robin Hood Road	Winston-Salem
Persons, Mrs. Elbert L., 723 Anderson Street	Durham	Powers, Mrs. Frank P., 2529 White Oak Road	Raleigh
Peters, Mrs. A. Richard, Jr., Washington Park	Washington	Powers, Mrs. John A., 2035 Sherwood Road	Charlotte
Peters, Mrs. William A., Jr., 206 S. Road	Elizabeth City	Prefontaine, Mrs. J. Edouard, 901 Dover Road	Greensboro
Peterson, Mrs. Osler L., 12 Davie Circle	Chapel Hill	Pressly, Mrs. C. Lowry, 1863 Cassimia Place	Charlotte
Pettus, Mrs. William H., Jr., 1901 Sterling Road	Charlotte	*Pressly, Mrs. David L., 576 Brookdale Boulevard	Statesville
Pfeiffer, Mrs. John B., Jr., 1705 Maryland Avenue	Durham	Pressly, Mrs. James L., Ingleside, Route 1	Statesville
Phelps, Mrs. James S., Jr.	Troy	Preston, Mrs. John Z.	Tryon
Phelps, Mrs. John M.	Creswell	Printz, Mrs. Don R., 340 Midland Drive	Asheville
Phifer, Mrs. Edward W., 505 W. Union		Pritchett, Mrs. Newton G., 3034 Lewis Farm Road	Raleigh
Phifer, Mrs. E. W., Sr., W. Union Street	Morganton	Proctor, Mrs. James T., Glen Lennox	Chapel Hill
Phillips, Mrs. Charles A. Speas, 310 S. Ashe Street	Southern Pines		
Phillips, Mrs. Ernest N., Finley Park	N. Wilkesboro		
Phillips, Mrs. William A., 120 S. Third Street	Wilmington		
Pickard, Mrs. Henry M., 5002 Oleander Drive	Wilmington		
Pickrell, Mrs. Kenneth L., 3 Sylvan Road	Durham		

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*Queen, Mrs. Hugh O., Rollins Avenue	Hamlet
*Query, Mrs. Robert Z., Jr., 1127 E. Morehead Street	Charlotte
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Rabold, Mrs. Leonard J., 109 W. Newlyn Street	Greensboro
Raby, Mrs. William T., 2121 Bucknell Avenue	Charlotte
Raiford, Mrs. Samuel	Black Mountain
Rachlin, Mrs. Stanton A., Veterans Hospital	Fayetteville
*Raiford, Mrs. Fletcher L., Haywood Forest	Hendersonville
*Raiford, Mrs. Theodore S., 30 Cedarcliff Road	Asheville
*Rainey, Mrs. William T., Sr., 1410 Ft. Bragg Road	Fayetteville
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Ramsay, Mrs. James G., Washington Park	Washington
Rand, Mrs. Cecil H.	Fremont
Raney, Mrs. R. Beverly, 1110 Shepherd Street	Durham
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Rankin, Mrs. Richard E.	Mt. Holly
Ranson, Mrs. J. Lester, Sr., 620 Hermitage Court	Charlotte
Ranson, Mrs. John L., Jr., 2819 Glendale Road	Charlotte
Raper, Mrs. James S., 16 St. Dunstons Circle	Asheville
*Rapp, Mrs. Ira H., 1922 Beverly Drive	Charlotte
Rathbun, Mrs. Lewis S., 46 Forest Road	Asheville
Ray, Mrs. John B.	Leaksville
Ray, Mrs. R. Clyde	West Jefferson
Rayle, Mrs. Wiley W.	Maiden
*Reece, Mrs. John C., Riverside Drive	Morganton
Reeser, Mrs. Archibald W.	Leaksville
Reeves, Mrs. George F., Morehead Street	Morganton
Reeves, Mrs. Jerome L.	Canton
Reeves, Mrs. Robert J., 920 Anderson Street	Durham
Register, Mrs. John F., 803 Magnolia Street	Greensboro
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Reid, Mrs. James W.	Lowell
Reid, Mrs. Ralph C.	Pineville
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*Rhodes, Mrs. James S., Jr.	Williamston
Rhodes, Mrs. John S., 2704 Vanderbilt Avenue	Raleigh
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Rice, Mrs. Robert S., 217 Circle Drive	Concord
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*Richardson, Mrs. James J., Prince Street	Laurinburg
*Richardson, Mrs. William P., Box 758	Chapel Hill
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Riggs, Mrs. Williard M.	Drexel
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Roach, Mrs. Leonard H., Cherokee Road	Asheville
Roach, Mrs. Robert B., 502 Kentwood Circle	Lenoir
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Roberson, Mrs. Robert S.	Waynesville
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Roberts, Mrs. Louis C., 3920 Plymouth Road	Durham
*Roberts, Mrs. R. Winston, 2723 Canterbury Trail	Winston-Salem
Roberts, Mrs. William McK., Babington Heights	Gastonia
Robertson, Mrs. Carroll B.	Jackson
*Robertson, Mrs. Edwin M., 1934 Hermitage Court	Durham
Robertson, Mrs. James M.	Harmony
Robertson, Mrs. John K.	Pembroke
Robertson, Mrs. John N., Sr., 807 Hay Street	Fayetteville
*Robertson, Mrs. L. Harvey, Country Club	Salisbury
Robertson, Mrs. Leon W., 3557 Chassin Circle	Tarawa Terrace
Robertson, Mrs. Logan T., Fairmont Terrace	Asheville
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Rodda, Mrs. John S.	Andrews
Rodgers, Mrs. William D.	Warrenton
Rodman, Mrs. Clark, Washington Park	Washington
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*Rogers, Mrs. Max P., 1112 Rolling Road	High Point
*Rogers, Mrs. Seymour S., 1503 Alandale Road	Greensboro
Romeo, Mrs. Bruno J., Laurel Park	Hendersonville
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Rose, Mrs. Abraham Hewitt, Hancock Street	Smithfield	Schlaseman, Mrs. Guy W., 819 Knox Street	Durham
Rose, Mrs. I. Woodall, Jr., 1316 Sunset Avenue	Rocky Mount	*Schoenheit, Mrs. Edward W., 25 Eastwood Road	Asheville
*Rose, Mrs. James W.	Pikeville	Schools, Mrs. Percy E., Jr., Patterson Apartments	Roanoke Rapids
Ross, Mrs. Donald M., 418 Fountain Place	Burlington	Schoonover, Mrs. R. A., 2107 Lafayette Avenue	Greensboro
Ross, Mrs. Otho B., 2424 Selwyn Avenue	Charlotte	Schweizer, Mrs. Donald C., 2709 W. Market Street	Greensboro
*Ross, Mrs. Otho B., Jr., 2114 Princeton Avenue	Charlotte	Scott, Mrs. Alan F., Mocksville Road	Salisbury
Ross, Mrs. Thomas W., 1929 Wendover Road	Charlotte	Scott, Mrs. Benton V. D., 18 Seventh Avenue, N.E.	Hickory
Rosser, Mrs. John H., 125 W. Race Street	Statesville	*Scott, Mrs. S. Floyd, Route 2	Burlington
*Rousseau, Mrs. James P., 808 Oaklawn Avenue	Winston-Salem	Sealy, Mrs. Will C., 2232 Cranford Road	Durham
*Royal, Mrs. Benjamin F.	Morehead City	Sears, Mrs. Warren W., 2808 Avondale Avenue	Charlotte
*Royal, Mrs. Donnie M.	Salemburg	*Seay, Mrs. Thomas W., 400 Carolina Avenue	Spencer
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Royster, Mrs. J. Dan, Box 68	Benson	Seigman, Mrs. Edwin L., 722 Falls Road	Rocky Mount
Royster, Mrs. Thomas S., Jr.	Henderson	*Selby, Mrs. William E., 1126 Belgrave Place	Charlotte
Ruark, Mrs. Robert J., 3132 Sussex Road	Raleigh	Semans, Mrs. James H., 1415 Bivins Street	Durham
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Rubin, Mrs. M. Harvey, 1813 Colonial Avenue	Greensboro	Sessions, Mrs. John T., Jr., 34 Hayes Road	Chapel Hill
Rudd, Mrs. Paul D.	Reidsville	Sessoms, Mrs. E. T.	Roseboro
Ruffin, Mrs. Julian M., 816 Anderson Street	Durham	Shackelford, Mrs. Robert W., 201 W. Pollock Street	Mt. Olive
Ruland, Mrs. M. B., 2075 Craig Street	Winston-Salem	Shafer, Mrs. Irving E., Sr., 230 W. Thomas Street	Salisbury
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Russell, Mrs. Phillip E., 6 Beverly Apartments	Asheville	Sharp, Mrs. Oliver L., 214 Country Club Drive	Greensboro
*Russell, Mrs. William Marler, 1 Lone Pine Road	Asheville	Sharpe, Mrs. Frank, III E. Hendrix Street	Greensboro
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Sale, Mrs. Charles S., 1151 Country Club Road	Wilmington	Shaw, Mrs. Lloyd R., 222 N. Oak Street	Statesville
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Salters, Mrs. Frederick H., 1103 Riverside	Elizabeth City	Sheridan, Mrs. Robert J., Eastern Avenue	Rocky Mount
Sample, Mrs. Robert C., Dana Road	Hendersonville	Sherrill, Mrs. Frank H., Jr.	Leaksville
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Sarven, Mrs. James	Waynesville	Shinley, Mrs. John L., 309 W. Church	Elizabeth City
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- *Silverton, Mrs. George, 502 W. 26th Street Lumberton
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- Simons, Mrs. Claude E., Raleigh Road Wilson
- Simpson, Mrs. Henry H., Route 1 Elon College
- Simpson, Mrs. Paul E., 2612 Dover Road Raleigh
- Simpson, Mrs. Thomas W., 175 Pennsylvania Avenue Winston-Salem
- Sinclair, Mrs. Carter A., 374 Sixth Street, N.W. Hickory
- *Sinclair, Mrs. L. Gordon, 3309 Waite Oak Road Raleigh
- Sinclair, Mrs. Roby T., Jr., Renovah Circle Wilmington
- Singletary, Mrs. William V., 2308 Sprunt Street Durham
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- Sinnett, Mrs. John F., 524 W. 8th Street Newton
- Siske, Mrs. Grady C. Pleasant Garden
- Skeen, Mrs. Leo B., 812 N. Main Street Mooresville
- Skinner, Mrs. Benjamin S., 2305 Woodrow Street Durham
- Skinner, Mrs. Louis C., E. 5th Street Greenville
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- *Slate, Mrs. John S., 1215 W. 4th Street Winston-Salem
- Slate, Mrs. Marvin L., 100 Brantley Circle High Point
- Sloan, Mrs. Allen B., 745 N. Main Street Mooresville
- Sloan, Mrs. David B., 1116 Magnolia Place Wilmington
- Sloan, Mrs. Henry L., Sr., 2208 Sherwood Avenue Charlotte
- Sloan, Mrs. Henry L., Jr., 154 Canterbury Drive Charlotte
- Sloan, Mrs. William Henry Garland
- Sluder, Mrs. Fletcher S., Chunns Cove Road Asheville
- Sluder, Mrs. Harold M., 2120 Princeton Avenue Charlotte
- Small, Mrs. Victor E., 719 College Street Clinton
- Smart, Mrs. G. Ford, 58 St. Dunstons Road Asheville
- Smedberg, Mrs. George A., 116 N. Ireland Street Burlington
- Smeltzer, Mrs. Dave H., 1832 Camp Green Avenue Charlotte
- Smerznak, Mrs. John J., 209 E. Corban Street Concord
- Smith, Mrs. A. Heyward, Jr. Waynesville
- Smith, Mrs. Albert G., 826 Louise Circle Durham
- Smith, Mrs. C. Gordon Snow Hill
- Smith, Mrs. Claiborne T., 204 Hickory Street Rocky Mount
- Smith, Mrs. Everette D. Candler
- Smith, Mrs. Franklin C., 2219 Radcliffe Avenue Charlotte
- *Smith, Mrs. Harold B., D Street N. Wilkesboro
- Smith, Mrs. J. Howard, Greenville Sound Wilmington
- Smith, Mrs. James J., 1204 E. 3rd Street Greenville
- Smith, Mrs. James McN. Rowland
- Smith, Mrs. Jay L. Jr., 225 N. Rowan Avenue Spencer
- Smith, Mrs. John G., 200 Wildwood Avenue Rocky Mount
- Smith, Mrs. Joseph, 1303 E. 5th Street Greenville
- Smith, Mrs. Joseph E. Walston
- Smith, Mrs. Joseph P., 933 Paremout Circle Gastonia
- Smith, Mrs. Melvin B. Ramseur
- Smith, Mrs. O. Norris, 104 W. Avondale Greensboro
- Smith, Mrs. Roy M., 220 E. Avondale Greensboro
- Smith, Mrs. Wilford M., 2423 Vail Avenue, Apartment 13-A Charlotte
- *Smith, Mrs. Sidney S., 905 Williamson Drive Raleigh
- Smith, Mrs. Slade A., 308 N. Madison Street Whiteville
- *Smith, Mrs. William A., 2310 White Oak Road Raleigh
- Smith, Mrs. William C., 1505 Evergreen Avenue Goldsboro
- Smith, Mrs. William Mitchell Boone
- Snelling, Mrs. John McL., 2733 Idlewood Circle Charlotte
- *Snipes, Mrs. Richard D., 312 Valley Road Fayetteville
- *Snow, Mrs. Leo B., N. Anderson Street Morganton
- Soquel, Mrs. John A., 1813 Grace Street Wilmington
- *Sowers, Mrs. Roy G., 2122 Lee Avenue Sanford
- Sparrow, Mrs. Harry W., 508 Holden Road Greensboro
- *Spaugh, Mrs. Earle, 2836 Selwyn Avenue Charlotte
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- Speas, Mrs. William P., Sr., 437 Springdale Avenue Winston-Salem
- Speas, Mrs. William P., Jr., 2027 Virginia Road Winston-Salem
- Spencer, Mrs. Richard E., 1302 Gracewood Street Greensboro
- Spencer, Mrs. William G., Jr., 301 West End Avenue Wilson
- Spikes, Mrs. Vera Baldwin, (Norman O.) 1023 W. Markham Avenue Durham
- *Sprunt, Mrs. William H., Jr., 1931 Virginia Road Winston-Salem
- Sprunt, Mrs. William H., III, Morgan Creek Road Chapel Hill
- Squires, Mrs. Claude B., 2128 Malvern Road Charlotte
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- Stallings, Mrs. S. Durwood, Jr. Zebulon
- Stanfield, Mrs. W. W. Dunn
- Stanley, Mrs. Sherburn M. Enka
- Stanton, Mrs. Allie McLeod, 8 Westover Heights Edenton
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- Starling, Mrs. W. Plato Roseboro
- Starr, Mrs. H. Frank, Sr. Sedgefield
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Stone, Mrs. Marvin L., 1605 Riveria Drive	Rocky Mount	Taylor, Mrs. Frederick R., 1113 Johnson Street	High Point
Stoneburner, Mrs. Richard G., 595 Parkview Drive	Burlington	Taylor, Mrs. James A., 507 Coolidge Street	Chapel Hill
Stovall, Mrs. Horace H., 619 Cornwallis Drive	Greensboro	*Taylor, Mrs. Thomas Jefferson, 614 Franklin Street	Roanoke Rapids
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Streeter, Mrs. Charles T.	Richlands	Taylor, Mrs. W. Ivey, Sr.	Burgaw
Stretcher, Mrs. Robert H.	Waynesville	Taylor, Mrs. W. Ivey, Jr.	Burgaw
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Stringfield, Mrs. James K.	Waynesville	*Templeton, Mrs. Ralph Gordon, W. College	Lenoir
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Stringfield, Mrs. Thomas, Jr.	Waynesville	Thomas, Mrs. Colin G., Jr., 12 Morgan Creek Road	Chapel Hill
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*Suiter, Mrs. Wester G., 501 Sycamore Street	Weldon	Thompson, Mrs. Fred A., 211 Norwood Street	Lenoir
Summerlin, Mrs. Arthur R., 3407 Churchill Road	Raleigh	Thompson, Mrs. George R. C., 2808 Chestnut Street	Wilmington
*Summerlin, Mrs. Harry, Church Street	Laurinburg	Thompson, Mrs. Lloyd J., 715 Oaklawn Avenue	Winston-Salem
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Summerville, Mrs. Walter M., 2330 Selwyn Avenue	Charlotte	Thompson, Mrs. Sanford W., Jr.	Morehead City
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Thorp, Mrs. Lewis S., Leoudis Apartments	Rocky Mount
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Trigg, Mrs. William W., Jr.	Reidsville
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Truslow, Mrs. Roy E.	Reidsville
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Turlington, Mrs. William T., Jr., Woodland Drive	Jacksonville
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Tyson, Mrs. Woodrow W., 1012 Wellington	High Point
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Valk, Mrs. Arthur DeT., 652 Summitt	Winston-Salem
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Vann, Mrs. Robert L., 2630 Phillip Street	Winston-Salem
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Verner, Mrs. Hugh D., 2300 Westfield Road	Charlotte
*Vernon, Mrs. J. Taylor, West Union Extension	Morganton
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Walker, Mrs. Louis K., 501 First Street	Ahoskie
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Wall, Mrs. Roscoe L., Jr., 521 Walter Court	Winston-Salem
Wall, Mrs. William S., 228 Hammond Street	Rocky Mount
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*Ward, Mrs. Frank P., Riverside Drive	Lumberton
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Ward, Mrs. W. Titus, 917 Williamson Drive	Raleigh
Ward, Mrs. Walter E.	Robersonville
Warren, Mrs. J. Benjamin	Oriental
Warren, Mrs. James V., University Apartments	Durham
Warrick, Mrs. Luby A., Route 1	Goldsboro
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Wassink, Mrs. William K.	Shiloh
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Webb, Mrs. Melvin W. Burnsville	Wilkinson, Mrs. James S., 3029 Granville Drive Raleigh
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Weeks, Mrs. Kenneth D., 1014 West Haven Boulevard Rocky Mount	Wilkinson, Mrs. Robert W., Jr. Wake Forest
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White, Mrs. Francis W. M. Halifax	*Wilson, Mrs. Franklin L., 2107 Dilworth Road, W. Charlotte
*White, Mrs. Hayes M., Jr. Asheboro	Wilson, Mrs. Hadley M. Boone
*White, Mrs. Philip F., Stanley Avenue Rockingham	Wilson, Mrs. James S., 1501 Washington Street Durham
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White, Mrs. W. Elliott, 3936 Churchill Road Charlotte	Wilson, Mrs. Samuel A., 710 East Park Drive Lincolnton
*Whitehead, Mrs. Seba L., 341 Vanderbilt Road Asheville	Wilson, Mrs. Thomas B., 3328 White Oak Road Raleigh
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Womble, Mrs. William H., Jr., Westridge Road	Greensboro
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Wood, Mrs. George T., Route 1	High Point
Wood, Mrs. Hagan E.	Black Mountain
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Wood, Mrs. William L.	Yadkinville
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Woodburn, Mrs. Clark H.	Littleton
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Wooten, Mrs. Cecil W., Jr., Rhem Street	Kinston
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Wooten, Mrs. John L., 109 S. Harding Street	Greenville
Wooten, Mrs. W. I., Maple Street	Greenville
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ANESTHESIA FOR ABDOMINAL SURGERY IN THE POOR RISK PATIENT
— JOHN C. MONTGOMERY, M.D.

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Anesthesia For Abdominal Surgery In The Poor Risk Patient

JOHN C. MONTGOMERY, M.D.

CHARLOTTE

Each year various new anesthetic drugs and methods are announced, until today the anesthetist has a multiplicity of agents from which to choose. This is called progress; I sometimes wonder if it is. Great effort is directed toward producing an agent—an intravenous one—that will be faster acting than the one in present use. The intravenous agents are a godsend. The pleasant induction they provide is quite a contrast to the old days of holding the patient for a 15 to 30 minute struggle with ether. The ease of administering this type of anesthesia is apt to lead us to forget or ignore its dangers. It was MacIntosh who said, "Pentothal is fatally easy to give."⁽¹⁾

Barbiturate derivatives are primarily hypnotics with an analgesic effect dependent on the depth of hypnosis. Depression of respiration and circulation follow directly the depth of anesthesia. This depressive effect does little or no harm to the robust, good risk patient, who is rarely affected by short periods of hypoxia. The same degree of hypoxia in an elderly patient with arteriosclerosis and coronary disease may precipitate serious trouble. Likewise a period of hypotension that would have no effect on a normal coronary system may be followed by an occlusion in such a patient.

The primary purpose of anesthesia is still the deadening of pain during surgery. This objective can usually be achieved with light planes of anesthesia. Unfortunately, anesthesia for abdominal surgery must meet another requirement—muscular relaxation, with a quiet abdomen. Such relaxation demands a price from the patient. The greater

the relaxation of the abdominal muscles, the less efficient the respiratory exchange.

Respiration, assisted by the circulation, has two functions. First is the intake of oxygen into the lungs, from which it is carried by the blood to the tissues. The second is just as important but is often overlooked: the elimination of carbon dioxide from the body. With extreme degrees of muscular relaxation, respiratory exchange is impaired. Both functions of respiration become depressed. Cyanosis indicates a deficiency of oxygen in the blood. The signs of carbon dioxide retention are not as apparent as those of oxygen deficiency. Increase in the rate and depth of respiration and a rising pulse rate with hypertension are the most common signs. A pushing type of breathing, caused by the excessive movement of the diaphragm, and the use of the accessory muscles of respiration are signs of carbon dioxide retention, often mistaken for insufficient depth of anesthesia. This patient needs proper ventilation—not deeper anesthesia or the addition of a muscle relaxant. Beecher and Todd⁽²⁾ reported a definite increase in the death rate following the use of the "curare" agents in such conditions. Relaxation is necessary for abdominal surgery. Adequate pulmonary ventilation is important in all cases, but in the poor risk patient it is absolutely essential. How can we get both? Let us first consider what makes the patient a poor risk.

Factors Increasing the Risk of Anesthesia

Age alone does not make a patient a poor risk. Newborns and infants stand anesthe-

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sia well if fluid balance, blood replacement, heat regulation, and adequate ventilation are kept in mind. The aged, likewise, undergo anesthesia well if not pushed too deeply. Does the condition necessitating the operation make the patient a poor risk, or is he a poor risk aside from the surgical condition?

Disorders of the circulatory and respiratory systems increase the risk of anesthesia in proportion to the amount of disease present. Hypertension, arteriosclerosis, coronary disease all increase the risk. A history of previous coronary occlusion makes a patient a poor risk for any plane of anesthesia. If an acute condition of the abdomen develops, he becomes an anesthetic problem. Muscular relaxation and proper respiratory ventilation are necessary.

Shock and or hemorrhage accompanied by lowered blood volume increase the risk of anesthesia. The decreased blood volume and anemia increases the problem of maintaining adequate peripheral circulation. The oxygen transport system is diminished.

Pulmonary disease, especially bronchiectasis and emphysema, increase the anesthetic risk. Proper ventilation is difficult to maintain. The addition to any of these conditions of an abdominal disorder requiring surgery increases the risk further. A ruptured ulcer or appendix, obstruction with vomiting and loss of fluids, and bleeding are a few of the more common surgical conditions. These or others may be of such severity alone to put the patient in the poor risk class.

Preoperative Management

In elective surgery patients should be brought to the best physical condition by medical management beforehand. Emergencies may not permit time for adequate preparation. Time must be taken to guarantee three essentials:

1. *An empty stomach.* Gastric lavage before induction of anesthesia is indicated if the stomach is known to be full. Vomiting and possible aspiration must be avoided. The hypoxia associated with vomiting in an anesthetized patient may prove fatal to a poor risk patient.

2. *An open airway.* Be sure that there is nothing that would prevent tracheal intubation.

3. *Proper premedication.* The effects of

proper sedation are cerebral depression, lowered metabolism, raised pain threshold, and protection against the undesired side-effects of anesthetic agents. The barbiturates are good hypnotics. The opiates reduce reflex irritability and lower metabolism. Atropine controls some side-effects by reducing secretions and blocking the parasympathetic nerves, especially the vagus. Reid⁽³⁾ states that atropine blocks the vagus and prevents cardiac arrest. The debilitated, the aged, the very young, and the shocked require reduced dosages. Waters⁽⁴⁾ found that The opiate to belladonna ratio of 25 to 1 produced less respiratory depression and nausea.

In shock, and if there is insufficient time for absorption before anesthesia, it is best to give preoperative drugs intravenously because of slow absorption when the blood pressure is below 90 systolic. Delayed absorption may cause the maximum effect of the drug to coincide with the depth of anesthesia, causing respiratory depression.

Agents and Techniques

There is no special anesthetic agent or technique for this group of patients. The principles of good anesthesia are the same for the good risk patient as for the poor. However, as mentioned before, the good risk can stand insults that the poor risk cannot.

I would like to stress two of these principles.

1. In the poor risk patient, allow time for a slow, smooth induction. Many anesthetic difficulties arise from efforts to save time. The close operative schedules leave inadequate time for a slow smooth induction. Everyone in the operating room has become adjusted to intravenous anesthesia, with its short induction period. The days when 20 to 30 minutes was the accepted time for obtaining surgical anesthesia are forgotten. We anesthetists feel the same way. We try to have a patient receiving inhalation anesthesia ready for operation as quickly as if he were getting an intravenous one. It just cannot be done. Excessive mucus, apnea, and laryngospasm are frequent effects of too rapid induction. These conditions cause hypoxia, which is one insult the

poor risk will not tolerate. Allow plenty of time for a smooth induction.

2. Use the method of anesthesia with which the anesthetist is most proficient. Do not insist on using an agent with which the anesthetist is not entirely familiar just because it is highly recommended in the literature.

Local and spinal injections

When the situation is such that all the accepted methods of anesthesia are available with trained personnel, what is the method of choice? Each case should be studied. The condition necessitating the operation is an important factor in the decision. Local anesthesia is the safest method, but is often unsatisfactory to both patient and surgeon. In operations for intestinal obstruction with distention, spinal anesthesia gives the best operative conditions — good relaxation with contracted intestines and a quiet abdomen. With a few precautions, adequate ventilation can be had. The blood volume should be near normal, since this factor will help prevent hypotension and provide an adequate oxygen transport system. If time does not permit the restoration of the blood volume to within normal limits, spinal anesthesia should not be used and oxygen should be given. If respiration is depressed by intercostal paralysis, it should be assisted by intermittent bag pressure to assure an adequate respiratory exchange.

Spinal anesthesia has several disadvantages. Hypotension is one. I prefer to give a vasopressor before every spinal anesthesia, repeating the dose if necessary. Another disadvantage is the limited duration of anesthesia. This can be increased by adding various vasopressor drugs to the anesthetic agent. Adriani⁽⁵⁾ found that the addition of epinephrine to procaine extended the duration of anesthesia by 65 per cent. The fractional method of administering spinal anesthesia by repeated injections of small amounts of the drug extends the time limit indefinitely.

Nausea, with or without retching and vomiting, is distressing to the patient and annoying to the surgeon. It is often unavoidable. It frequently becomes necessary to put the patient asleep to stop it. A light plane of anesthesia with one of the intravenous barbiturates will frequently

overcome this complication; at other times it only makes matters worse. Laryngospasm may follow the retching and vomiting. Hypoxia or even cyanosis may result. Before an open airway can be obtained the poor risk patient may have suffered irreparable cardiac damage. If it becomes necessary to supplement the spinal anesthesia with general anesthesia, be sure it is deep enough to abolish reflexes caused by exploring the abdomen. Deliver me from the surgeon who wants the patient to have a "whiff of gas" or "a little Pentothal" with a spinal anesthesia for a laparotomy!

Spinal anesthesia is not my method of choice for the poor risk patient. At times, however, the better operative conditions obtained with it outweigh its disadvantages. I think the calculated risk is justified.

Inhalational agents

Among the inhalational agents, cyclopropane and ether are the only two that can produce sufficient muscular relaxation for abdominal surgery in the average case. Cyclopropane alone, if pushed, will sometimes give adequate relaxation. Such concentrations frequently cause cardiac irregularities such as arrhythmias and bradycardia. Respiration is shallow and inefficient. Cyclopropane "shock" from retention of carbon dioxide frequently follows the elimination of this accumulated carbon dioxide. The addition of a muscle relaxant removes the necessity of pushing the level of anesthesia, but the problem of inadequate respiration remains. Wiggin has found that when curare is used to supplement cyclopropane anesthesia, respiration is inadequate when abdominal relaxation is good, and vice versa⁽⁶⁾.

The intravenous barbiturates alone rarely give sufficient relaxation unless respiration is depressed. The desired relaxation can be obtained by adding one of the muscle relaxants—intermittent doses of one of the longer-lasting agents or a drip of short-acting succinylcholine. Both the barbiturate and the muscle relaxant depress respiratory exchange, one centrally and the other peripherally. Care must be taken to see that proper ventilation is maintained. This is best done by intubation and supplementary respiration by intermittent pressure on the breathing bag. This method has been widely used with excellent results. Our experience

with it at Charlotte Memorial Hospital has been less successful. Relaxation has not always been good; severe drops in blood pressure during surgery and in the recovery room have been frequent; hypotension and very shallow respiration even after recovery from anesthesia have been common. For these reasons I prefer to avoid the combination of an intravenous barbiturate and a muscle relaxant with poor risk patients. As stated previously, it is the administrator of the anesthetic that is important, not the method. I feel sure our troubles associated with this method are due to the administrators and not the agents.

Ether

In the poor risk patient my personal choice is ether as the primary agent. The manner of induction is optional. One of the gases or an intravenous barbiturate can be used. If an intravenous agent is chosen, just enough is given to produce unconsciousness. Surgical anesthesia is obtained by ether. Too large amounts of Pentothal produce shallow respiration or apnea, delaying the absorption of the ether and causing hypoxia, which is to be avoided if possible. When the jaw becomes relaxed, oxygenate the patient well, then intubate. I prefer a cuffed tube attached directly to a Y piece, with the circle filter. It has a few advantages. Aspiration around the tube is prevented. Should pressure on the bag become necessary, the stomach will not be inflated as well as the lungs. The dead space of the mouth, pharynx, and face piece is eliminated—an important factor in children. Leaks in the circuit are fewer. The pharynx can be packed, if cuffed tubes are not available. One criticism of the cuffed tube is damage to the trachea from pressure of the inflated cuff. I have seen no such trauma, even after continuous use of the tube for 12 to 14 hours.

After surgical anesthesia has been achieved and the patient stabilized, little additional ether is needed. Replacement of blood loss and maintenance of adequate ventilation are of primary importance. Prevention of hypoxia and hypercarbia is dependent on ventilation. The question of whether controlled respiration should be used is often asked. The important point is that adequate respiration be maintained.

If this can be done best by taking over respiration, then use controlled respiration. We think that supplementing the inspiratory phase of respiration gives adequate ventilation in the majority of cases.

During the past year we have used the Jefferson ventilator in a few cases—primarily for procedures involving the open chest. It provides both positive and negative pressure. With hand pressure we expand the lung and let it empty by its own elasticity. With the ventilator, the lung is emptied by the negative pressure phase. This is of particular value in the presence of emphysema. The ventilator has been of great value in some cases where oxygenation was difficult.

Anesthesia for Cesarean Section

Before closing, a word on anesthesia for cesarean section may not be amiss. Two patients are involved—the mother and the baby. In cases of prematurity or fetal distress, some form of conduction anesthesia is indicated. Local anesthesia is the safest method, but sometimes is unsatisfactory to the mother. I prefer the spinal technique. The baby is unaffected by it, and blood loss is much less. A small dose—75 mg. of procaine or less—gives anesthesia for one hour. If the baby is full term, general anesthesia may be used. With delivery of the baby within 10 to 15 minutes from induction, intravenous anesthesia is satisfactory. After this, resuscitation of the infant may be necessary. Cyclopropane with or without ether is satisfactory. Any agent is all right if the patients—mother and child—are both well oxygenated.

Summary

The principles of anesthesia are the same for poor risk patients as for the good. There are a few points, however, with regard to anesthesia for the questionable risk that I think should be emphasized.

1. Use the agent with which the anesthetist is most proficient.
2. Allow time for a slow, smooth induction. Avoiding laryngospasm, apnea, and breath-holding will save time.
3. Whatever method is used, be sure that ventilation is adequate—that is, that the patient is well oxygenated and that carbon dioxide does not accumulate. The poor risk patient will not tolerate hypoxia.

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Thromboembolic Disorders

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Thromboembolic disease is one of the most common, disastrous, and urgent emergencies in virtually all fields of medical practice, yet until recently it has too frequently been unsuspected, untreated or undertreated. We still have much to learn about it, but our knowledge of its diagnosis and treatment has grown greatly in the recent past. Some controversy about the pathogenesis and methods of treatment, continues, but this is a healthy situation which serves to promote investigation of the condition. This paper is primarily intended to summarize the present knowledge of this vital subject.

A high index of suspicion is necessary in order to diagnose thromboembolic conditions in time for effective, and often life-saving, treatment. Early diagnosis, as well as full realization of the emergency nature of the situation, is essential. Without it, many patients may be deprived of the good results that are usually obtained by proper treatment. Many cases of sudden death or acute collapse which have been loosely diagnosed as "coronaries" are actually acute embolic phenomena. This is particularly true in postoperative and cardiac patients of all types.

Manifest Forms of Thromboembolic Disease

All thromboembolic disorders arise from some form of intravascular clotting. Thrombi may produce signs and symptoms of disease at the site of origin, or fragments of the thrombus may become detached, form emboli, and produce acute symptoms elsewhere in the vascular system.

1. *Arterial thrombi* may arise either in the pulmonary arterial tree or in the systemic peripheral arteries. Arteriosclerosis

is the usual predisposing factor.

2. *Intracardiac thrombi* occur primarily in patients with myocardial infarction or auricular fibrillation. In becoming detached these produce emboli to the systemic arteries or the pulmonary arterial tree.

3. *Venous thrombi* occur as a complication of many diseases, and may produce both local disorders and emboli which travel via the venous system through the right side of the heart to the pulmonary arterial tree.

Embolism

1. *Visceral embolism*: Embolization to a visceral organ produces signs and symptoms which are determined by the size of the embolus and its destination. Some may require surgical intervention, while others are best treated symptomatically.

2. *Peripheral arterial embolism*: When an embolus occludes an artery of an extremity, the integrity of the limb as well as the life of the patient is at stake. Therapy here involves the judicious use of sympathetic block, embolectomy, and anticoagulants.

3. *Cerebral embolism* usually produces typical hemiplegia, as seen in many cerebrovascular accidents. Use of anticoagulants has a definite place in the treatment.

Pulmonary embolism is by far the most common, and the most fatal, result of thromboembolic disease. The first pulmonary embolus may be fatal, but many are not, making it possible to prevent a final fatal episode by the adequate use of anticoagulants or surgical ligation.

Acute Thrombotic Vein Disease

The central point of interest in throm-

thromboembolic diseases is thrombosis of the veins of the legs and/or pelvis, mainly because it occurs in connection with a wide variety of conditions. Current methods of treatment are fairly satisfactory if sudden death does not intervene before diagnosis is made and treatment instituted. Most pulmonary emboli originate in the deep veins of the calf and, less frequently, in the plantar veins of the foot⁽¹⁾. Hunter and his associates⁽²⁾ found, in a study of unselected autopsies, that thrombosis of these leg veins, usually multiple and bilateral, had occurred in 52 per cent of the cases.

The usual source of fatal emboli in medical patients is in the leg veins, particularly in cardiac patients. A study of 130 fatal, autopsy-proven emboli at Boston City Hospital⁽³⁾ showed that 48 were associated with cardiac disease, 22 with hemiplegia, 11 with neoplasms, and 33 were postoperative. The emboli originated in the leg veins in 91 per cent of the cases.

Pathogenesis

Three factors are said to be pertinent to the pathogenesis of venous thrombosis. (1) damage to the endothelium of veins, (2) increased coagulability of blood, and (3) venous stasis.

Ochsner⁽⁴⁾ has stated that thrombophlebitis and phlebothrombosis are different in every respect except that in each there is a clot within the vein. Thrombophlebitis is said to be thrombosis associated with inflammation of the vein wall, which produces a firmly adherent clot. Phlebothrombosis, according to Ochsner, is on the other hand associated with a loosely attached clot, presumably due to the increased coagulability of the blood and venous stasis. Because of this difference, it is said that embolism is much more likely to occur in phlebothrombosis.

Bauer⁽⁵⁾ and Homans⁽⁶⁾ feel that phlebothrombosis and thrombophlebitis are different stages of the same process. Bauer's concept implies that increased coagulability of the blood and venous stasis are of primary importance.

Diagnosis

In untreated thromboembolism the mortality rate is quite high according to most authorities, ranging upwards of 40 per cent. In fatal cases, thromboembolic disorder is often unsuspected.

Although early diagnosis is often difficult, constant effort to find evidence of thrombosis in the deep veins of the legs will undoubtedly reduce the mortality. Special attention should be paid to patients who are good candidates for thromboembolism⁽⁷⁾—that is, who are more than 50 years of age or who present any of the following conditions: (a) a history of previous thromboembolism; (b) varicosities; (c) malignancy; (d) evidence of extensive abdominal and pelvic procedures; (e) fractures of the femur and amputation of the lower extremities; (f) obesity; (g) congestive heart failure.

Frequent examination of the legs of patients who are candidates for thromboembolism is essential. The legs are examined best with the knees flexed. Pain in the calf, deep tenderness, increase in size of the calf, increased firmness in one calf, positive Homan's sign, or tenderness of the soles of the feet is a definite clue. An increase in the pulse, temperature, or leukocyte count, otherwise unexplained, are suggestive. Signs of inflammation and edema finally occur. Venous thrombosis may be inferred if pulmonary infarction occurs.

Pulmonary Embolism and Infarction

A sudden, acute attack of chest pain, dyspnea, acute cor pulmonale, syncope, or shock in a patient, with or without signs of venous thrombosis, pre-existing auricular fibrillation, or myocardial infarction, should strongly suggest the possibility of pulmonary embolism.

Pulmonary infarction may follow pulmonary embolism, or may be the first evidence that embolism has occurred. Cough, hemoptysis, pleuritic pain, fever, and signs of pulmonary consolidation or pleural friction rub are cardinal findings in pulmonary infarction. Roentgen examination of the chest will demonstrate the infarct in only 50 per cent of the cases, and then the condition is frequently confused with pneumonia.

Treatment of Thromboembolic Disease

The choice of proper treatment will vary according to: (1) the site of origin of the thrombus, and (2) the site of localization of the embolus if embolization has occurred.

Beyond the treatment directed at salvage

of the infarcted tissue and the accompanying systemic reaction, the objectives then are: (a) to prevent the formation of thrombi in the first place; (b) to prevent the further growth or multiplication of thrombi within the heart or vessels; (c) to prevent embolization once thrombi have formed; (d) to prevent the growth of a thrombus on the embolus if embolization has occurred; (e) to prevent additional embolization once one or more emboli have become detached.

Prevention of thrombus formation in chronically ill, postpartum, or postoperative patients requires careful management, with special attention to the leg veins. This includes exercises, elastic supports, and early ambulation, where possible. The remaining objectives have a common denominator consisting primarily of the use of anticoagulants and/or ligation therapy.

Anticoagulants

Where possible, the use of anticoagulants in thromboembolic disease produces a better physiologic result than does surgery. Anticoagulants are now widely employed in a variety of conditions⁽⁸⁾: (1) *Rheumatic heart disease and auricular fibrillation*: Patients with rheumatic heart disease, mitral stenosis, and auricular fibrillation frequently extrude emboli to the lungs and to the peripheral circulation. If a patient has had one embolus, the chances are he will have more. Anticoagulants have been employed in these cases, even for years, with good results.

2. *Myocardial infarction*: Studies by many groups, statistically confirmed by the American Heart Association, have shown conclusively that the proper use of anticoagulants has significantly reduced morbidity and mortality in myocardial infarction. Patients having repeated attacks of myocardial infarction have been successfully given long term anticoagulant therapy.

3. *Acute arterial occlusion*: Following embolism or other forms of acute occlusion of an artery, the blood flow in the affected capillary bed is very sluggish. While collateral blood flow is being established, there is danger of thrombosis *in situ* in the capillaries and veins of this area. Anticoagulants may help avert this danger.

4. *Cerebral vascular disease*: This is an

enormous and much neglected field of medicine. Anticoagulants in cerebral thrombosis or embolism may prevent further embolism or extension of the thrombus, and encourage more rapid disintegration of the original thrombus by the enzyme systems of the blood. Also, many of these patients are confined to bed and have an increased tendency to thrombosis, phlebitis, and pulmonary embolism.

5. *Phlebitis and pulmonary embolism*: This was the first condition to be successfully treated with anticoagulants. Results have been confirmed by virtually every group working in this field. The mortality can be reduced from 18 to less than 1 per cent.

Anticoagulants vs. ligation

Considerable controversy still exists between those who favor anticoagulant therapy and those who feel that ligation is the method of choice in venous thrombosis. Repeated pulmonary embolism has occurred in spite of either method. On the other hand, both methods will significantly reduce the incidence of pulmonary embolism. It cannot be said, therefore, that either method is consistently better than the other. Individual circumstances have to be considered in deciding the method of choice in a given case.

Julian and Dye⁽⁹⁾ state that surgical ligation is preferred over anticoagulants only in the presence of the following conditions: (1) a demonstrable degree of liver disease; (2) renal disease; (3) pregnancy; (4) recent surgical procedures on the central nervous system, bladder and prostate, or operations (involving large) surfaces of recently dissected tissue; (5) a distinct tendency to bleed; or (6) where laboratory facilities are inadequate for the proper control of anticoagulant therapy.

Except for the above situations, anticoagulants are usually preferred by most physicians. When surgical ligation is carried out, it must be adequate to be effective. Femoral ligation is usually done bilaterally, and if the process is suspected of having extended into the pelvis, vena caval ligation must be done for adequate control.

Anticoagulant drugs

Research is still seeking the ideal anticoagulant. All those in use have certain

drawbacks. Heparin and Dicumarol are still the most widely used.

Heparin has a marked and immediate effect on the clotting mechanism. The exact mode of action is not known, but several possibilities have been advanced. The anticoagulant effect of heparin is usually measured by the coagulation time of whole blood as determined by the Lee and White method, with a normal of 5 to 8 minutes. The therapeutic range suggested is two to three times the normal level. Heparin is effective only when given parentally. Continuous intravenous drip allows the best control of the coagulation time, but this method requires constant attention and is more disturbing to the patient. Intermittent intravenous, subcutaneous, or intramuscular administration of the drug at intervals of four to 12 hours is the simplest method to manage, but has the disadvantage of peaks and valleys in the coagulation time, as the effect of one dose is dissipated in four to six hours. Concentrated aqueous solutions and gelatin-dextrose preparations produce anticoagulant activity for 12 to 18 hours when given by deep intramuscular injection.

Several antidotes for heparin-induced hemorrhage are available. Protamine sulfate, toluidine blue, and polybrene given intravenously will restore coagulation time to normal. Fresh whole blood is also valuable.

Bishydroxycoumarin (Dicumarol) acts to decrease the stable factor and to diminish the concentration or alter the molecular structure of prothrombin in the plasma, although there is no effect on prothrombin which has already been formed. This may explain the delay of 36 to 72 hours in the onset of clinical action of Dicumarol. This delay, and the slow rate of excretion, permitting accumulation, are the chief disadvantages of this drug, requiring frequent check of prothrombin time and making it difficult to anticipate therapeutic levels. Dicumarol can be given orally, and, when a maintenance dose has been determined, lends itself to long-term ambulant therapy. Prothrombin time should be maintained at two to three times normal, or 25 to 35 seconds. The average control is 11 to 13 seconds. Excessive hypoprothrombinemia may be reversed by the oral or intravenous use of vitamin K (or better, K-1 oxide),

by fresh whole blood, or a combination of these.

Many other oral anticoagulants have been advocated and are receiving laboratory and clinical trial. Most of these are coumarin derivatives or have a coumarin-like action. The important thing for the physician to remember however, is to be thoroughly familiar with the drugs he employs. A combination of heparin with a long-acting anticoagulant is usually employed when an immediate as well as a prolonged effect is indicated. Heparin is discontinued when the activity of the long-acting agent becomes apparent.

Anticoagulants should be used only by those who are thoroughly familiar with the technique. Adequate laboratory facilities must be available at all times, and careful control must be exercised. For long-term therapy an intelligent and cooperative patient as well as a meticulous physician is vital.

Summary

Thromboembolic disorders—often unsuspected, overlooked, or taken lightly—are of primary medical importance. The use of anticoagulants is valuable in reducing morbidity and mortality in a wide range of these conditions, and should be considered the treatment of choice except in certain fairly well defined exceptions. The physician should be thoroughly familiar with these drugs and the technique of their use, and have access to adequate laboratory facilities if he intends to use them.

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Trends in Cesarean Section in Asheville

1950 - 1954

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ASHEVILLE

In 1949 consolidation of various hospitals in Asheville left only two hospitals with obstetric units. Nearly all of Asheville physicians belonged to both staffs; but the general practitioners tended to do more of their obstetric work at St. Joseph's Hospital, while those limiting their work to obstetrics and gynecology tended to do more of their work at Memorial Mission.

By the end of 1950 it was obvious that there was a considerable difference in the work at the two hospitals. This was most marked in the cesarean sections rates. At St. Joseph's Hospital in 1950 there were 20 cesarean sections in 1,264 deliveries for a rate of 1.54 per cent. At Memorial Mission Hospital there were 78 sections in 1,000 deliveries, for an incidence of 7.8 per cent. It seemed obvious that either one hospital was doing too many sections or the other too few, or that both situations existed. Consequently a study was undertaken to ascertain the over-all situation.

In 1950 when these statistics were gathered, staff rules at Memorial Mission made consultation before cesarean section obligatory. However, this rule was loosely applied and very few serious consultations were held. At St. Joseph's there were no definite rules concerning consultation, although it was customary to speak to the head of the department before operating.

Table 1 shows the reasons for the operations at the two hospitals.

Unfortunately the charts on 4 patients undergoing cesarean section at Memorial Mission Hospital were missing, so that the percentages are based on 74 operations.

The first striking difference in the two services was that 22 repeat sections were done at Memorial Mission, while at St. Joseph's only one repeat section was done. Presumably repeat operations were being done at Memorial Mission so that patients could be sterilized. This fact, however, does

Table 1
Indications for Cesarean Section
St. Joseph's Hospital Memorial Mission Hospital

	No.	Per Cent	No.	Per Cent
Repeat sections	1	5	22	29.7
Cephalopelvic disproportion	4	20	27	36.5
Premature separation of the placenta	5	25	7	9.5
Placenta praevia	5	25	3	4.0
Breech presentation	0	0	4	5.4
Toxemia	0	0	2	2.7
Miscellaneous (transverse lie, carcinoma of the cervix, diabetes, intestinal obstruction)	5	25	9	12.2

not account for the high rate of sections at Memorial Mission, since even if the repeat sections were evenly divided between the two hospitals, the Memorial Mission rate would be reduced only to 6.7 per cent, which is still high.

Another striking difference is that 50 per cent of the sections at St. Joseph's Hospital were performed because of bleeding, while at Memorial Mission only 13.5 per cent were done for that reason. A study of the individual records led me to feel that bleeding in several of the patients operated on at St. Joseph's was of an extremely mild nature, and vaginal delivery might have been safely accomplished.

The next significant difference was in the percentage of sections done for cephalopelvic disproportion. At Memorial Mission 36.5 per cent of the total sections were done for this reason, while at St. Joseph's the percentage was only 20 per cent. Again a study of individual records was enlightening. Only 13 of the 27 patients who had sections at Memorial Mission for disproportion were given any test of labor. In many cases at both hospitals the test of labor was wholly inadequate by any standards.

In several cases a good test of labor was reported, but the nurses had noted only

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mild, irregular contractions. X-ray pelvimetry was used in 19 cases at Memorial Mission and only once at St. Joseph's. Several sections were done on the basis of an adverse x-ray report alone. The patients with cephalopelvic disproportion seemed to me to be the most mishandled group. They were not given an adequate test of labor, records obviously came very close to falsification, and x-ray pelvimetry was misused either by its omission or by relying on it entirely.

Fetal Mortality

On the basis of the above findings it was felt that a study of the fetal mortality as it related to cesarean section might be revealing. Certainly it should shed light on whether a very high or a very low rate was justified. The uncorrected gross fetal mortality for St. Joseph's was 4.1 per cent, and for Memorial Mission 3.7 per cent.

A review of the records showed that there were 9 stillbirths and neonatal deaths at St. Joseph's which would not have occurred had cesarean section been performed, and there seemed every reason why good obstetrics should have indicated that a cesarean be done. These cases included 3 difficult breech deliveries; 2 difficult mid-forceps deliveries; a ruptured uterus in a patient with a previous section scar who was allowed considerable labor; a version extraction after a long hard labor; a manual dilatation of the cervix in severe toxemia; and a patient with placenta praevia who, in spite of continuous bleeding, was allowed to continue in labor for six hours after the diagnosis had been established. In each of these cases the fetal heart beat was present when the patient entered the delivery room.

At Memorial Mission Hospital there were only 2 fetal deaths which might have been averted had cesarean section been done. One was a breech delivery after three days of labor, and the other was a difficult mid-forceps delivery.

The fetal mortality for babies delivered by section was 20 per cent at St. Joseph's and 6.5 per cent at Memorial Mission. This reflects, I believe, the higher incidence of operations done for bleeding at St. Joseph's and the large number done at the other hospital for causes not related to the baby,

such as repeat and elective sections.

The morbidity was 10 per cent at St. Joseph's and 17.6 per cent at Memorial Mission. There were no maternal deaths.

Probably the most damning indication of poor obstetrics was found in 2 cases, in each of which a badly macerated fetus was delivered by cesarean section when it was obvious from the record that neither obstetrician knew that the baby had been dead for several days.

Beginning of Five-Year Program

The above findings were reported to the Buncombe County Medical Society in a paper in the fall of 1951. It was pointed out that too many sections were being done at Memorial Mission and too few at St. Joseph's. It called attention to the babies lost at one hospital through too radical pelvic delivery, and to the questionable obstetric judgment in handling cases of disproportion at the other hospital.

At St. Joseph's a system of rules was put into effect requiring consultation not only for cesarean sections, but for mid-forcep deliveries; primipara breeches; prolonged labor, and toxemia. Consultants were to be men with major privileges in obstetrics. All cases of section, neonatal deaths and stillbirths were to be reviewed at the monthly meeting of the section on obstetrics and gynecology. At Memorial Mission Hospital, where consultation was already required, it was decided to review all cases of cesarean section at each monthly meeting.

For the most part these rules have been put into effect and adhered to with a minimum amount of acrimony on the part of the staffs. I believe that the relationship between the general practitioner and specialist has been strengthened, and only in isolated instances have personal difficulties arisen.

Results

The results of the program over a five-year period, including the first year studied, are now available and a happier picture is emerging.

Table 2 shows the five-year statistics in brief:

Table 2
Results of Program Over Five-Year Period
(1950-1955)

Year	Deliveries		Cesarean Sections (Per cent)		Gross Fetal Mortality	
	St. Joseph's	Memorial Mission	St. Joseph's	Memorial Mission	St. Joseph's	Memorial Mission
1950	1,264	1,000	1.5	7.8	4.1	3.7
1951	1,353	1,251	1.1	4.2	3.5	5.7
1952	1,306	1,421	2.2	4.2	4.2	3.6
1953	1,315	1,345	2.1	3.8	2.5	3.8
1954	1,192	1,516	1.5	2.6	2.8	3.4

It will be seen from this table that the cesarean section rate for St. Joseph's Hos-
pital has not altered greatly, but that there
has been a satisfactory reduction in the
gross fetal mortality. At the same time the
number of cesarean sections at Memorial
Mission Hospital has been greatly reduced,
with some corresponding drop in the fetal
mortality.

A review of the fetal deaths for 1954 in
both hospitals showed that, whereas in
1950 there were 9 fetal deaths at St.
Joseph's which I felt might have been
averted by cesarean section, there were no
such cases in 1954. Likewise, at Memorial
Mission there were no such deaths in 1954,
whereas there had been 2 in 1950.

Indications

The changes in the major reasons given
for operations in 1950 and 1954, respec-
tively, are presented in table 3.

Table 3
Indications for Cesarean Section at St. Joseph's
and Memorial Mission Hospitals
(1950-1954)

	(Per cent)			
	St. Joseph's		Memorial Mission	
	1950	1954	1950	1954
Cephalopelvic disproportion	20	38.8	36.5	23.8
Previous sections	5	22.2	29.7	48.8
Premature separation of the placenta	25	5.5	9.5	5.1
Placenta praevia	25	5.5	4.0	7.7
Preeclampsia	0	11.1	2.7	2.6

It will be seen from this table that at
the hospital where too many babies were
being lost by heroic pelvic deliveries, the
incidence of cesarean sections for dispro-
portion almost doubled. At this hospital in
1950 x-ray pelvimetry was done before sec-
tion in only 1 case; in 1954 all patients
operated on for disproportion were exam-
ined by x-ray.

At Memorial Mission the number of op-

erations for disproportion dropped sharply.
It was in this group that in 1950 it was felt
that much unnecessary operating occurred.
In 1954, 5 of the 9 patients had adequate
tests of labor, and 8 had x-ray pelvimetry.
The 4 patients to whom an adequate test of
labor was not given had histories of pre-
vious difficult, traumatic pelvic deliveries.
St. Joseph's reduced its number of sec-
tions done because of bleeding. This
change had seemed to be indicated from the
study in 1950.

It will be noted that the number of re-
peat sections remains high at Memorial
Mission. This seems unavoidable in a local-
ity where the section rate has approximated
8 per cent for some years. The number of
repeat operations should begin to drop
soon.

Morbidity and mortality

The morbidity at Memorial Mission
dropped from 17.6 per cent to 5.1 per cent.
At St. Joseph's it dropped from 10 per
cent to zero. This, of course, represents
satisfactory progress.

The uncorrected fetal mortality for the
babies delivered by section at Memorial
Mission Hospital remained approximately
the same, dropping from 6.5 to 5.1 per cent.
At St. Joseph's the rate dropped only from
20 to 6.6 per cent. This rate, while it com-
pares favorably with the 14.4 per cent re-
ported from the Philadelphia Lying-in Hos-
pital⁽¹⁾ is very high as compared to the
5.3 per cent of the New York Lying-in
Hospital⁽²⁾ and the 3.9 per cent at the Beth
Israel Hospital in Boston⁽³⁾. The high fetal
mortality at this hospital deserves further
attention.

There was one maternal death in 1954.
This patient had a cesarean section at 8
months because of impending death from
metastatic melanosarcoma. She succumbed
one week postoperatively. The baby sur-
vived.

Comment

It seems fair to say that the obstetric
picture in Asheville has undergone marked
improvement in the past five years.

At St. Joseph's Hospital the cesarean
rate has remained the same, but by better
selection of cases the fetal mortality has
been reduced and babies whose mothers
should have had sections are no longer be-
ing lost by pelvic delivery.

At Memorial Mission Hospital a truly remarkable reduction in the cesarean section rate has taken place, while at the same time a satisfactory gross fetal mortality has been maintained. The drop in the section rate has come about through more judicious use of tests of labor and a reduction in the number of operations done for disproportion.

It would seem from the experience at this hospital that Rubin⁽³⁾ is incorrect when he says, in a recent article, "The higher the section rate the lower the fetal mortality."

Dr. Clifford, the head of the Pediatric Department at the Boston Lying-in Hospital told the Travel Club of this society last November that the first step in improving medical practice is to keep a set of books. I feel that the change for the better in Asheville came about largely because we began to keep books.

The mere fact that the men knew that the records would be reviewed and discussed created a desire for consultation before performing an operation which might turn out badly or which might be branded as unnecessary. It also put the consultant on his mettle to give real thought to the case rather than to agree irresponsibly to whatever his colleague desired to do.

Also, a statistical analysis helps the man with a small practice to realize that, while certain cases do not occur frequently enough in point of time to be alarming, percentage-wise they may show up alarmingly.

The system of consultation has also reduced the number of general surgeons doing cesarean section. In 1950, 9 cesarean sections were done by general surgeons called in consultation by general practitioners. This accounted for several questionable sections being done on bleeding patients at St. Joseph's. In 1954, 4 operations were done by surgeons, all for clear-cut indications.

Conclusion

It can be said that obstetric care in Asheville has greatly improved in the past five years as measured by a reduction in the cesarean section rate, better judgment in the use of the operation, and a reduction of the gross fetal mortality.

This change has been aided by the pres-

entation of departmental statistics to the hospital staffs and by adhering to rules governing consultation and monthly review of the records.

It is urged that all hospitals, however small, keep a close watch on their statistics and attempt to reevaluate policy wherever the need arises.

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Discussion

Dr. Wallace B. Bradford (Charlotte): Dr. Rathbun's forthright paper not only airs some obstetric linen from the "land of the sky," but provides data of interest to us all. The problems regarding the indications for and incidence of cesarean section in Asheville exist to some extent in all hospitals and communities, and similar studies elsewhere would doubtless be revealing.

It is only by reviewing our cesarean sections statistically and individually in departmental meetings that we can answer such questions as: (1) Are the indications valid? (2) What is the likelihood of a difficult and traumatic vaginal delivery and its sequelae? (3) How serious a complication is breech presentation? (4) What of the uncertainties of fetal salvage with and without cesarean section? (5) What of the patient's obstetric future? Only in trying to answer such questions as these can we reasonably expect to improve obstetric care from the standpoint of cesarean sections. These questions are often unanswerable, and there is much room for honest and intelligent difference of opinion.

The 20 per cent fetal mortality for babies delivered by section at St. Joseph's in 1950 seems unduly high, and is doubtless due primarily to the exceptionally low incidence of cesarean sections in that institution in that year. More liberal use of cesarean section should tend to reduce fetal mortality by dilution of the dangerous complications, if for no other reason. I think the author's opinion that too few operations were done in one hospital is undoubtedly correct, and that too many were done in the other hospital is probably correct.

It is noted that lowering the cesarean section rate at Memorial Mission did not affect the gross fetal mortality, and that St. Joseph's fetal mortality rate was lower than Memorial Missions, although the incidence of cesarean section was also consistently lower. The fact that nearly 50 per cent of the sections done at Memorial Mission in

Table 1
Experience With Cesarean Section
Ten Years 1945-1954
Charlotte White Hospitals

Hospital	Deliveries No.	Sections Cesarean		Maternal Deaths		Stillborn No.	Neonatal Deaths No.	Gross Fetal Mortality
		No.	Per Cent	No.	Per Cent			
A	17,527	255	1.45	3	(1)	300	350	3.7
B	13,803	488	3.53	5	(0)	228	251	3.5
C	11,584	514	4.44	7	(1)	193	254	3.9
Total	42,914	1,257	2.93	15	(2)	721	855	3.7

1954 were indicated by previous section shows the pyramiding effect of this indication in the Protestant hospital. An increasing cesarean incidence tends to perpetuate its rising tendency by virtue of the repeat section factor.

I have summarized 10 years of experience with cesarean section in the white hospitals of Charlotte. In 43,000 deliveries the incidence of cesarean section has been about 3 per cent. Two maternal deaths have been associated with the operation. Our statistics are in accord with Dr. Rathbun's in failing to show an improvement in the gross fetal mortality by a higher rate of cesarean section. The hospital with the highest cesarean section rate also had the highest gross fetal mortality. This might be explained in several ways, but it certainly fails to support the contention that a high incidence of cesarean section saves many babies' lives.

I do not mean to condemn the operation under discussion. In our own group we use it more frequently than the 3 per cent over-all rate of our city. We feel that many breech and diabetic babies are salvaged by cesarean delivery, and that a real trial of labor is most important and generally of much more value than pelvimetry. In our uncertainty we need the courage to await an adequate trial of labor when, it is indicated. We need to remember that a successful abdominal delivery can be accomplished in 30 minutes after an attempted forceps delivery has failed, and that it is not cowardly occasionally to take off the forceps. The statement has been made that any fool can put on a pair of forceps, but it takes a man to

know when to take them off.

It is not sound to conclude that a difficult vaginal delivery necessarily means that cesarean section should have been done, and one must remember that subsequent vaginal deliveries are often surprisingly easy and uncomplicated. The belief of some that all difficult mid-forceps deliveries should be avoided by the liberal employment of cesarean section is statistically unproved. Likewise, obstetric judgment is highly debatable.

We do not deny that cesarean section is now relatively safe, but we must not be led to sacrifice our obstetric art on the altar of skillful surgical technique because of the safety of an operation that can overcome real or imaginary complications and eliminate burdensome responsibility which should logically be carried as a natural part of our professional life.

Cesarean section and sterilization are still most often operations of the carriage trade, and many babies with a background of inestimable potentiality can never be conceived because of the limitation on the size of the family that is customarily imposed by this operation.

Since the trend is definitely upward, there is probably more danger that the cesarean rate will climb too high than that it will remain too low. The proponents of a higher and higher section rate to minimize obstetric difficulties more and more have not proved their viewpoint. Each case should stand on its own merit, and a charitable attitude should influence our opinions toward each other as we try to evaluate this controversial matter.

Visual Appraisalment

The visual recognition of disease which is responsible for the majority of snap diagnoses is losing ground as attention becomes more and more directed to the minutiae of the ancillary sciences. This is a pity, for the wood is often missed for the trees. Thus a misdirected spate of investigations might well be spared by an intelligent appreciation of the facies of locomotor ataxia as a pointer to the source of pain, or unhurried observation of the body may reveal fasciculation as a sinister sign among symptoms which appear trivial. Douthwaite, A.H.: Pitfalls in Medicine, Brit. M.J. 2:895 (Oct. 20) 1956.

Salk Vaccine in Poliomyelitis Control in North Carolina

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During North Carolina's first large scale outbreak of poliomyelitis in 1955, inoculations of Kolmer and Park-Brodie preparations were given. These early attempts to develop a preventive were discouraging, because the inoculations proved to be unsafe.

After the large outbreak in 1944 and the epidemic of 1948, there was an urgent desire to do something to control poliomyelitis. With little evidence to support the possible value of gamma globulin as a weapon against poliomyelitis except that it did not cause undesirable reactions and that it had proved useful in the control of measles and hepatitis, field trials were carried out in 1952 and 1953 under the auspices of the University of Pittsburgh and the National Foundation for Infantile Paralysis, involving 54,000 children and 235,000 respectively.

Gamma Globulin Program

During the summer of 1953, before the University of Pittsburgh study was completed, North Carolina was confronted with a high state-wide incidence of poliomyelitis, with 926 cases reported that year. The disease occurred in epidemic or near epidemic form in several western counties, led by Caldwell (145 cases), Catawba (102), and Avery (26). As a result of this high prevalence and the appearance of many cases early in the poliomyelitis season, the State Board of Health, in cooperation with local medical and health workers and the National Foundation, and upon specific request of local health boards and county medical societies, conducted mass gamma globulin programs in the three counties

mentioned. A total of 30,000 children were inoculated during June, July, and August: 12,800 in Caldwell County during June, 14,761 during July in Catawba County, and 3,092 in Avery County early in August. Since the administration of gamma globulin was started after the epidemic was well under way in each county, the program gave no indication as to its effectiveness in altering the incidence of the disease. Later studies showed that gamma globulin has no value either in preventing or treating poliomyelitis.

Guilford County Field Trial of Salk Vaccine

One year later, in the summer of 1954, the administration of the Salk poliomyelitis vaccine was begun in North Carolina with the field trial program carried out in Guilford County, under the sponsorship of the National Foundation, at the request of the County Medical Society. The splendid teamwork demonstrated by the society made this trial an outstanding success and contributed much to the nation-wide evaluation of the Salk vaccine as a preventive against poliomyelitis paralysis.

The program was started early in the poliomyelitis season, and included only second-grade school children, with the first and third grades used as controls. The first inoculations were given to 2,866 second-grade school children during the week of May 11, the second to 2,822 children during the week of May 18, and the third to 2,594 children during the week of June 15, approximately six weeks after the first. The fact that only 44 children of the original 2,866 receiving the first inoculation failed to receive the second, and that only 272 failed to receive the third inoculation indicates the thoroughness with which this program was carried out by the participating agencies—the County Medical Society, the County Health Department, and the local chapter of the National Foundation.

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During the remainder of the 1954 calendar year no case of poliomyelitis paralysis occurred among the 2,866 children who were given the vaccine under this field trial program, whereas among the first- and third-grade controls there were 8 cases—1 paralytic and 7 non-paralytic.

The National Foundation Program

After analyzing the results of the nationwide field trial of 1954, the National Foundation announced early in 1955 that during the spring of that year the Foundation would make available, through the health departments of the states, sufficient Salk vaccine to immunize approximately 9,000,000 children in the first and second grades of public, private, and parochial schools, and those children who had participated in the field trials of the vaccine.

The first shipment of the vaccine was received in North Carolina during the third week of April, 1955. In accordance with requirements of the selected age groups (estimated by the State Board of Health), it was shipped by the manufacturer, on order of the National Foundation, to six points in North Carolina (Asheville, Charlotte, Greensboro, Raleigh, Williamston and Wilmington) from which it was distributed to adjacent counties.

The administration of National Foundation vaccine on a mass basis, by county health departments, began in all counties of the state during the latter part of April. To serve a total of 250,227 children enrolled in the first and second grades of public, private and parochial schools, and those who had participated in the 1954 field trials, the Foundation purchased and shipped to North Carolina 391,476 cc. of vaccine. From this allotment 223,136 children were given first inoculations, 136,871 were given second inoculations, and 2,254 were given booster inoculations (the 1954 Guilford County field trial participants). The loss of 86,265 children who failed to take the second inoculation after having received the first was significantly influenced by reports of the release of unsafe vaccine by one manufacturer late in April. The 29,215 cc. of N.F.I.P. vaccine which was unused during the 1955 summer program was utilized after the beginning of the federal vaccination program, which started immediately following the official closing of the National Foundation

program in this state on October 10, 1955.

The Governor's Advisory Committee

Following a suggestion by the Surgeon-General of the Public Health Service, and in anticipation of the enactment of pending legislation which would provide for the federal purchase and distribution of poliomyelitis vaccine to the states on a population basis, Governor Hodges appointed a Poliomyelitis Vaccine Advisory Committee in May, 1955. At its first meeting, held on July 9, 1955, the committee decided on an allocation of all vaccine available to the state, a minor proportion to be made available for use without cost and to be administered through official health agencies, and a major proportion to be distributed through commercial channels for use by private physicians. This 30:70 ratio was adhered to during the period of greatest shortage until January 30, when the committee authorized a slight change in the vaccine purchase ratio for public and private use and greatly relieved the demand being made upon official agencies for the vaccine.

Following the first meeting of the State Advisory Committee on July 9, 1955, subsequent meetings were held on December 10, 1955, January 30, 1956, May 6, 1956, and June 21, 1956. At these meetings policies relating to the purchase and distribution of poliomyelitis vaccine in the state were recommended to the State Board of Health.

The Federal Program

In July, 1955, legislation was enacted by the Congress to provide funds for the purchase, distribution, and administration of poliomyelitis vaccine, the funds to be allotted to the states on an age-group basis (persons under 20 years of age and pregnant women). The original federal appropriation for this purpose approximated \$30,000,000 for the entire country, and was supplemented by the Congress to extend the program through June 30, 1957. The total allocation to the State of North Carolina for the period August, 1955, through June 30, 1957, was \$2,247,282. Of this amount, \$1,174,716.16 has been spent for the purchase of vaccine and \$175,095.67 for the administration of the program through the purchase of supplies and the employment of personnel in the various counties of the state and, to a very small extent, in the central office of

Table 1

Reported Cases of Poliomyelitis with Rates Per
100,000 Population, United States and
North Carolina, 1915-1955

Year	United States No.	United States Rate	North Carolina No.	North Carolina Rate
1915	1,639	3.1	—	—
1916	27,363	41.4	—	—
1917	4,174	5.0	—	—
1918	2,543	2.9	23	0.9
1919	1,967	2.3	42	1.7
1920	2,338	2.4	25	1.0
1921	6,301	6.1	36	1.4
1922	2,255	2.0	30	1.1
1923	3,489	2.9	16	0.6
1924	5,262	4.6	16	0.6
1925	6,104	5.2	79	2.7
1926	2,750	2.2	112	3.8
1927	10,533	8.8	24	0.8
1928	5,169	4.2	51	1.7
1929	2,882	2.3	133	4.2
1930	9,220	7.5	96	3.0
1931	15,872	12.8	104	3.2
1932	3,820	3.0	54	1.7
1933	5,043	4.0	30	0.9
1934	7,510	5.9	45	1.3
1935	10,838	8.5	675	20.1
1936	4,523	3.5	52	1.5
1937	9,514	7.4	106	3.1
1938	1,705	1.3	50	1.4
1939	7,343	5.6	116	3.3
1940	9,804	7.4	74	2.1
1941	9,086	6.8	168	4.6
1942	4,167	3.0	82	2.2
1943	12,450	9.3	36	1.0
1944	19,029	14.3	861	24.0
1945	13,624	10.3	159	4.5
1946	25,698	18.4	157	4.3
1947	10,827	7.5	300	8.1
1948	27,726	19.1	2,498	65.8
1949	42,033	28.4	229	5.9
1950	33,300	22.0	756	18.6
1951	28,386	18.5	314	7.6
1952	57,879	37.2	538	12.9
1953	35,968	22.7	926	21.9
1954	38,476	23.9	732	17.1
1955	29,270	17.8	463	19.7
284.4			229.6	
20 year aver.			20 year aver.	
14.22			11.48	

Source: United States—NFIP
North Carolina—PHSS

the State Board of Health. Total expenditures, as of November 28, 1956, represent 60 per cent of the funds made available to the State of North Carolina by the federal government for the poliomyelitis vaccination program.

Use of Federally Purchased Vaccine

Through the week of November 17, 1956, a total of 1,420,146 inoculations have been given under the federal program (exclusive of those given from commercially purchased vaccine and given in offices of private physicians). Of this total 653,918 were first

Table 2

Type Poliomyelitis Among 54 Cases Who Had One
Or More Inoculations, North Carolina
January 1-October 31, 1956

Inoculations	Rec'd	Total	Paralytic Cases	Nonparalytic Cases
Total		54	14	40
One		22	10	12
Two		21	4	17
Three		11	—	11

Source: Division of Epidemiology
PHSS 11/16/56

inoculations, 575,386 were second inoculations, and 190,842 were third inoculations. These figures do not include 223,136 first inoculations, 136,871 second inoculations, and 2,254 booster inoculations given under the 1955 vaccination program sponsored by the National Foundation for Infantile Paralysis. They do include inoculations given to 30,926 pregnant women of all ages. Including vaccinations given under both programs (N.F.I.P. and federal), 51.3 per cent of the total eligible population have received one or more inoculations. Further analysis shows that 41.7 per cent of the eligible population have received the second inoculation, and 11.5 per cent have received the third.

Special State Medical Society Program (July - August, 1956)

The state-wide vaccination program was greatly stimulated during July and August, 1956, by the full endorsement of the program by the Medical Society of the State of North Carolina and the effective work of its Special Committee under Dr. Sam Ravenel. The state-wide leadership given the program by Dr. Donald Koonce as president of the Society has enabled the State Board of Health to purchase enough vaccine to meet all demands made upon county health departments. The active participation of private physicians in conducting special public clinics for the free administration of vaccine to applicants among the eligible group resulted in a total of 144,411 inoculations during this period, with vaccine furnished through federal funds by the State Board of Health to local health departments for this program. Of this total, 76,632 were first inoculations, 55,356 were second inoculations, and 12,423 were third inoculations (the latter for those who had received the first and second inoculations prior to the beginning of the

Table 3
275 Poliomyelitis Cases Reported in North Carolina: January 1 - October 31, 1956
By Age Group, Race, and Paralytic Status

AGE GROUP	COLORED			Total	WHITE			Total	GRAND TOTAL
	Non-Paralytic	Paralytic	Unknown		Non-Paralytic	Paralytic	Unknown		
0- 4	13	27	1	41	17	35	2	54	95
5- 9	7	12	—	19	32	16	1	49	68
10-14	5	5	—	10	18	14	—	32	42
15-19	1	—	—	1	6	9	—	15	16
20-24	—	1	—	1	9	12	1	22	23
25-29	1	2	—	3	8	6	—	14	17
30-35	—	—	—	—	4	4	—	8	8
35 and over	1	2	—	3	2	1	—	3	6
Totals	28	49	1	78	96	97	4	197	275
Nonparalytic				124					
Paralytic				146					
Unknown				5					
Total				275					

Source: Division of Epidemiology
CDC Section 12-5-56

State Medical Society special clinics program). These figures do not include the many children vaccinated with commercially available vaccine by private physicians as private patients, the number of which is not known since no reports were required. The combined total of those who have received one or more inoculations however, is estimated to be about 70 per

cent of the eligible population (under age 20 and pregnant women).

There is still a big job to be done to reach an estimated 30 per cent of the eligible population who have received no vaccine and to reach an even larger group of 50 per cent who have not received the second and/or third inoculations. This job must be done in order to provide the great-

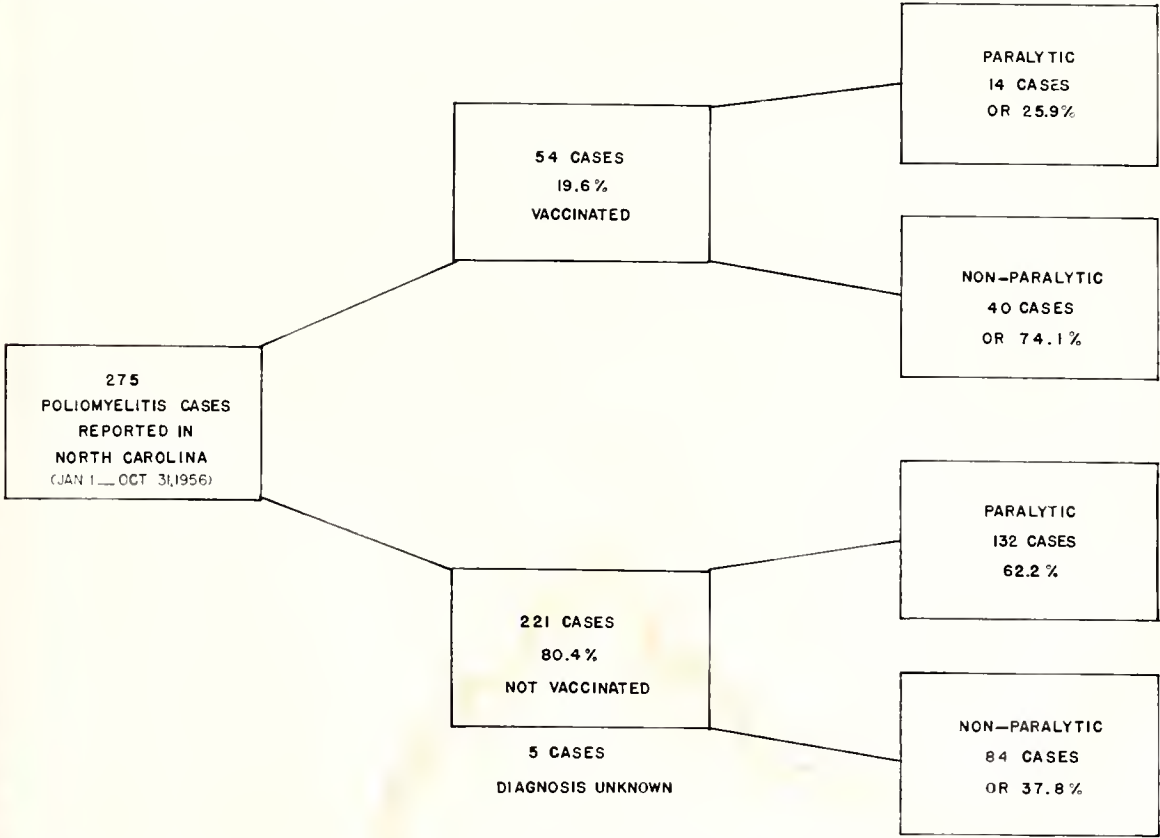


Fig. 1. 1956 paralytic case rate per 100,000: One or more inoculations, 6.37 per cent; no inoculations, 22.1.

est possible protection. There is reason to believe that the poliomyelitis vaccination program was partly responsible for making the 1956 incidence of poliomyelitis one of the lowest in the history of the State, with only 301 cases reported through November 28. A recent news report states that Denmark has completed immunizations for 90 per cent of its population under the age of 40.

Presentation of Tables and Graphs

Those with experience in epidemiology, particularly in the area of health statistics, hesitate to comment on tables and graphs which have been developed in an atmosphere of many unevaluated variables. Our comments, therefore, are merely explanatory notes and not a presentation of conclusions to be drawn from the data reported.

In the 20 year averages shown in table 1, the rates are not weighted for population changes and are therefore only an approximation. There is no observable or predictable cyclic change for the period that poliomyelitis has been reported in the United States and in North Carolina.

The early returns shown in table 3 justi-

fy continuation of the Salk vaccine inoculations with increased confidence.

Even with little change in the total number of paralytic cases during 1956, the percentages in those vaccinated as compared with those not vaccinated shows a trend in this small sample which indicates the effectiveness of Salk vaccine in preventing paralytic poliomyelitis (fig. 1).

Conclusion

The State Board of Health appreciates the support and personal assistance given to state and local health departments by members of the Medical Society of the State of North Carolina in the promotion of the state-wide poliomyelitis vaccination program. President Koonce's full endorsement of the program and the effective work of the Ravenel Poliomyelitis Vaccine Committee, together with the equally effective work of similar committees appointed in counties for the promotion of the vaccination program from July 1956, have played a most important part in making possible a united effort, which it is hoped will eventually contribute toward the complete control of crippling poliomyelitis.

The Results of Azo-Gantrisin Therapy In 228 Patients With Urinary Tract Infection

FRED K. GARVEY, M.D.

and

JAMES M. LANCASTER, M.D.

WINSTON-SALEM

The sulfonamide, Gantrisin, exerts a bacteriostatic action on a variety of microorganisms; it is highly soluble; and it is excreted with the urine in high concentrations. These properties make it an effective chemotherapeutic agent in the treatment of most urinary tract infections⁽¹⁾.

Another compound, Pyridium, has been widely used in combating urinary infections for many years. In addition to its mild antibacterial properties, it is rapidly excreted by the kidneys and has an anesthetic effect upon the mucosa of the urinary

tract, with resulting relief of bladder symptoms—frequency, burning and dysuria—that are commonly associated with urinary tract infections⁽²⁾.

A combination of Pyridium and sulfonamide compounds has been shown to result in greater antibacterial activity than that exerted by either compound alone⁽³⁾.

In view of the individual and combined properties of these drugs, we, along with others, have for a long time been using them in combination to treat infections of the urinary tract.

Recently a new combination, Azo-Gantrisin, has become available. This drug contains 50 mg. of Pyridium and 500 mg. of

From the Department of Surgery, Division of Urology, The Bowman Gray School of Medicine of Wake Forest College, Winston-Salem.

Gantrisin. This paper presents our clinical results with this new compound.

Materials and Methods

In this study Azo-Gantrisin was administered as a urinary antiseptic to patients with the numerous types of infection seen in the usual office practice of urology. There was no selection of patients. Evaluation of the results was based on the clinical response—that is, relief of symptoms, clearing of pyuria, and duration of illness. Cultures of the urine were obtained only when indicated in the course of evaluation of each patient. The usual dosage was two tablets given four times daily initially, later reduce to one tablet four times a day.

Results

Two hundred and twenty-eight ambulatory patients were treated. This series comprised 95 patients with cystitis, cystourethritis, and/or trigonitis—acute, subacute, and chronic; 32 with acute and/or chronic prostatitis; 71 who had undergone transurethral resection of the prostate or bladder neck; 16 with posterior urethritis; 8 preoperative patients with symptoms of bladder neck obstruction; 4 patients with carcinoma of the prostate who also demonstrated obstructive bladder neck symptoms, and 2 patients with periurethritis accompanying urethral stricture.

Of the 228 patients to whom the drug was given and who were followed sufficiently to allow evaluation, various degrees of improvement were observed in 97 per cent. Prompt symptomatic relief with clearance of pyuria in six or less days of treatment occurred in 43 per cent. Marked symptomatic improvement was recorded in 42 per cent. Included in the latter group were 8 patients with symptoms of bladder neck obstruction who were relieved of burning and dysuria, but not of frequency. These patients subsequently underwent prostatectomy.

Seven patients (3 per cent) showed equivocal or no clinical improvement following a course of Azo-Gantrisin. It is interesting that these unimproved patients were females manifesting symptoms, but minimal cystoscopic findings, of cystitis,

trigonitis and/or urethrocystitis. In each instance the microscopic examination of their urine was negative.

Side-reactions

Only two side-reactions were noted — (1) a macular skin reaction associated with fever, and (2) angioneurotic edema. Neither was serious, and both subsided after the drug was withdrawn. We were unable to determine whether the reactions were due to Gantrisin or to Pyridium, but since, in our experience, reactions to Pyridium have been extremely rare, we would suspect Gantrisin as the offender.

Organism response was noted to be similar to that obtained in an earlier clinical evaluation of Gantrisin by Garvey and Strawcutter⁽¹⁾.

Summary and Conclusion

1. Two hundred and twenty-eight patients with urinary tract infections were treated with Azo-Gantrisin.
2. Clinical evaluation of the results revealed various degrees of improvement in 97 per cent of the patients treated.
3. Two mild drug reactions were encountered.

The prompt and effective clearing of organisms and pyuria that was obtained in this series and in a previous one with Gantrisin⁽¹⁾, plus the dramatic relief of bladder and urethral symptoms which can be attributed to the Pyridium, indicate to us that Azo-Gantrisin is an ideal compound for use in common urinary tract infections that we see from day to day in the practice of urology. Chemotherapeutic treatment alone is not always adequate in controlling some urinary tract infections. Consequently the primary lesion should be located and definitive treatment given.

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Anesthetic Deaths

DAVID A. DAVIS, M.D.

CHAPEL HILL

One of the most tragic occurrences in modern hospitals is the failure of a patient to survive what has been termed one of mankind's greatest blessings — surgical anesthesia. Fortunately this tragedy is rare, but it does happen, and death may strike when least expected. This is not a local problem, nor is it one of recent years. Accurate statistics are not available, but many have suggested that, like carcinoma of the lung, anesthetic deaths are on the increase. As a killer, anesthesia must be ranked with poliomyelitis, scarlet fever, tetanus, acute rheumatic fever, brain tumor, appendicitis, and accidental death from poisoning or shooting. Between July 1, 1953 and December 1, 1954, 55 North Carolina citizens died as a result of anesthesia⁽¹⁾.

Who Are the Victims?

Who are those who die from anesthesia? Usually they are not those patients whose hearts are known to be weak or whose lungs are crippled; nor are they necessarily those who are having an operation as a last resort in an attempt to save or prolong life. These tragedies are just as frequent in younger people—wives being anesthetized to accomplish delivery without further pain, children having tonsils removed, patients having hernias repaired or appendices extracted. These are people who have every right to expect many more years of life.

Why Do They Die?

Why do these patients die? The answer to this question is still a great mystery. Pathologists contribute little in most cases, but through no lack of effort on their part. Many drugs have been used to obtund pain, and deaths have occurred in patients under the influence of them all. In the past 50 years little has been added to knowledge of the fundamental mechanism of action of these drugs. All anesthetics are poisons, some more potent than others. If reasonable and well defined precautions are observed, there is no good reason why one drug should kill more frequently than another.

If one attempts to single out the most

frequent factor in anesthetic deaths, it would be interference with the exchange of oxygen for one of several reasons. The sequence of cyanosis and "cardiac arrest" is too common, in spite of the universal knowledge that hypoxia can be rapidly fatal. During the induction of, maintenance of, and recovery from anesthesia, hypoxia is inexcusable, and cyanosis is evidence of a serious error in the management of an anesthetized patient. Recently a report concerning death during a tonsillectomy was received from another state. In discussing this death, the anesthetist stated, "I presume hypoxia was an underlying cause of this cardiac standstill, if one can call this a contributing factor when it is present so often during tonsillectomy with no resultant cardiac standstill." This is in fact an admission of faulty management of an unconscious person. Furthermore it reflects an attitude that is all too common in those concerned with anesthesia. There is too much satisfaction with the concept that because a patient survives, he or she has been managed properly. The tolerance of the human body for abuse is phenomenal, and if a few patients die every year, consider how many more have been subjected to abusive practices; how many have almost died; how many have awakened from "a poor anesthetic," thinking they have had the benefit of good medical care.

Who Is Responsible?

In considering causes of death, attention must be diverted from drugs and anesthetic agents to those responsible for the care of anesthetized patients. Let it be clearly understood that no individual or group of individuals is being, or can be, singled out for criticism in this matter. Each person who assumes any part of the responsibility for the care of the anesthetized patient should be prepared to carry out his or her task with the benefit of the background of training and experience which human life deserves. To be sure, the elements of the "calculated risk" and human frailties enter into this picture, but foolhardy practices and human ignorance play a much more important part.

Read before the Section on Anesthesia, Medical Society of the State of North Carolina, Pinehurst, May 2, 1956.



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Who are we who are responsible for this deplorable situation? We are those who, armed with a medical degree and a certain amount of special training, sit on a stainless steel throne and trespass on human physiology. We are those who administer anesthesia because "no one else is available." We are those who commit the same errors every day and, because some patients survive these insults, think we are doing a proper job. We are nurses who are "doing the best we know how"—often under the direction of a surgeon who knows less. We are surgeons who are eager to get on with the job—or who lose sight of time in the effort to achieve technical perfection. We are those who use new drugs eagerly with little understanding of their properties—or even of those agents which are discarded. We are those who use curare to quiet the heaving abdomen of a patient struggling to breathe; who anesthetize patients with full stomachs and are unprepared to prevent their drowning in vomitus; who leave patients after they have returned from operating rooms, and return to find them dead. We are those who give large doses of morphine to patients not yet restored to consciousness. We are hospitals who cannot afford enough anesthetists or adequate equipment. We are those who know that conditions are unsatisfactory and do nothing; or who see no reason why anesthesia for obstetrics should be as good as that given in surgery. We

are orderlies, floor nurses, supervisors, nurse anesthetists, and physicians. There are no qualifications which we have to meet. Unless we are licensed physicians, there are no legal restrictions on our use of these lethal anesthetic agents. If, in our ignorance, we commit an act of negligence and damages are sought, they may be secured from the surgeon who was in the midst of a difficult dissection at the time the error was committed; or the hospital may be forced to pay for the inadequate training of someone who is not even employed for the purpose of administering anesthetics.

Conclusion

Until anesthetists become aware of their errors; until surgeons cease judging the quality of anesthesia by the speed of induction and muscular flaccidity; until hospitals assume a greater interest in factors on which human lives depend; until licensing authorities recognize the dangers of anesthesia in unskilled hands, and until patients become more fully aware of the hazards incurred when their lives are placed in the hands of others, these deaths will continue to be on our hands.

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The more experienced physicians devote a greater time to the taking of history than to physical examination. Failure to do so leads to more mistakes than any other error of approach. But even this must be guided by experience, which alone allows us to sift the relevant from the irrelevant. That process cannot be taught but must be achieved afresh by each succeeding generation. Above all, the *initial* symptoms of disease are so important. They may be transitory and thus omitted from the account, especially if there be a sense of hurry at the consultation. For that reason, the study of symptomatology is often best carried out in the peaceful atmosphere of the consulting room rather than in an out-patient department, where the silent pressure of an overfilled appointment list exerts a sense of urgency which is incompatible with clear thought. Douthwaite, A. H.:—Pitfalls in Medicine, *Brit. M.J.* 2:397 (Oct. 20) 1956.

Meigs's Syndrome

JAMES S. MITCHNER, M.D.

LAURINBURG

The condition characterized by hydrothorax, ascites, and ovarian tumor is now recognized under the generally accepted name of Meigs's syndrome. More than 100 cases have been reported to date. The case herein reported is of interest in view of the presence of an early carcinoma of the cervix in association with ovarian tumor, ascites, and hydrothorax. Familiarity with this condition, leading to its proper management, is so rewarding that another case report seems justified.

In 1937 Dr. Joe V. Meigs⁽¹⁾ of Boston became the first to report a series of cases of the condition which now bears his name. In 1879, Cullingworth⁽²⁾ had reported the first case in the literature. His patient had bilateral ovarian fibromas, ascites, and pleural effusion. Six months later the diagnosis was confirmed at autopsy. In 1892 Tait⁽³⁾ published his findings in a patient with hydrothorax, ascites, and abdominal tumor. This patient was thought to have a hopeless malignant condition, and was treated by means of palliative paracentesis. Slightly over a year later, after having had 30 abdominal celiotomies, each producing 10 to 15 liters of ascitic fluid, the patient underwent an exploratory operation. The chest fluid was successively aspirated on three occasions during this same period. Tait found a large (1,000 Gm.) solid fibromatous tumor of the right ovary. The patient's recovery was complete. This experience was the basis of Tait's much-quoted dictum: "No set of circumstances in the abdomen, however apparently unfavorable, justifies us in an absolutely unfavourable condemnation of any particular case."

Numerous theories have been advanced to explain the presence of the fluid, no one of which has been satisfactorily proved. The very fact that removing the ovarian tumor prevents recurrence of the fluid suggests a direct cause-and-effect relationship.

Several mechanisms or factors have been postulated: (1) minute openings in the diaphragm; (2) caval and azygos obstruc-

tion; (3) the alarm reaction of Selze, resulting from peritoneal trauma by the tumor; (4) abnormal lymphatic drainage; (5) lowered serum proteins; (6) certain cardiac and renal disorders, and (7) incomplete twisting of the pedicle of the tumor.

In a later article Meigs⁽⁴⁾ gave a lucid discussion of the various explanations and cited some interesting studies of his own. He demonstrated the identical composition of the thoracic and abdominal fluid. India ink added to the ascitic fluid soon appeared in the thorax in the same concentration, but would not pass from the thoracic cavity into the abdomen. Meigs attempted to demonstrate small openings in the diaphragm by instilling air in the chest and then looking for it in the abdomen by x-ray. Neither this procedure nor its reverse—putting air in the peritoneal cavity and looking for it on a chest film—was successful in demonstrating direct communications⁽⁵⁾.

Geibel⁽⁶⁾, according to Lawson⁽⁷⁾, observed that a large ovarian fibroma lost one-third of its weight by exudation over a period of 24 hours. Lawson verified the experiment, but noted that such conditions as surface area, room temperature, and humidity had to be considered. Rubin and others⁽⁸⁾ suggested that venous and lymphatic obstruction may result from obstruction due to the fibromatous nature of the tumors. It is a well known fact among pathologists that ascites from any cause found at autopsy is frequently associated with a pleural effusion. Kelly and Cullen⁽⁹⁾ long ago pointed out the frequency with which ascites was associated with pelvic tumors other than ovarian fibromas.

In 44 collected cases Simon⁽¹⁰⁾ found the effusion to be on the right side in 29, on the left in 5, bilateral in 9, and not recorded in 1. Lawson suggested that the greater negative pressure on the right side might possibly explain the preponderance of pleural effusion on this side.

No doubt Meigs originally wished to include only the ovarian fibromas in this group of cases. Rubin and others⁽⁸⁾ sug-

gested that many of the earlier cases were actually thecomas. Willis⁽¹¹⁾ has suggested that ovarian fibromas represented the final stage in a series of tumors of the granulosa-cell, theca-cell and lutein-cell group.

Clinically, abdominal enlargement is usually the predominant symptom in these patients. They commonly give a history of weight loss. A large pleural effusion may cause dyspnea. Abnormal vaginal bleeding has been noted. In some of the advance cases ankle edema is present.

Case Report

On March 15, 1952, a 47 year old white woman was admitted to the Church Home and Hospital in Baltimore, Maryland. Her chief complaint was "bloating" of the stomach and loss of appetite. Her past history was entirely negative. For about four months she had noted weakness, some loss of appetite, and easy fatigue. During the same time her abdomen had gradually increased in size. There had been no vaginal bleeding for five years. She was a para 4-0-3.

Physical examination showed a patient who looked chronically ill. The abdomen was large and full, particularly the lower part. Over the chest there was dullness with diminished breath sounds at the right breast. There was a definite abdominal fluid wave, and in the right lower quadrant a movable mass, measuring 15 cm. in diameter, was felt. This mass was a part of the right adnexa. The cervix showed moderate cervicitis. A roentgenogram of the chest showed clouding of the right lower lung field, most likely due to fluid. This was confirmed by thoracentesis which yielded straw-colored fluid. Routine preoperative cervical biopsy was reported as pre-invasive carcinoma (League of Nations 0 classification).

An exploratory operation was done through a low mid-line incision. Approximately 5 liters of straw-colored fluid were removed from the peritoneal cavity. A hard smooth mass, 12 to 14 cm. in diameter, had replaced the right ovary. The left tube, left

ovary, uterus, and the remainder of the abdominal organs were all normal. Panhysterectomy, bilateral salpingo-oophorectomy, and omentectomy were performed. The patient's postoperative course was uneventful.

Microscopic sections showed the ovarian tumor to be a thecoma-like tumor. The microscopic picture was uniform, with prominent bundles of spindle cells of large diameter. Numerous strands of connective tissue passed through the tumor. Very little doubly refractile fat was noted. A few scattered hyaline plaques were seen. Further sections of the cervix again showed pre-invasive carcinoma.

The patient was discharged in good condition on the tenth postoperative day. Roentgen examination of the chest one month later showed no additional fluid. She has since remained well and has shown no signs of further disease.

Summary

A case of Meigs's syndrome associated with ovarian thecoma and preinvasive cervical carcinoma is reported. A brief review of the literature is given.

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FEBRUARY, 1957

Guest Editorial

ARSENIC AND NORTH CAROLINA

In the past few years the North Carolina Department of Agriculture has discouraged the use of arsenic-containing insecticides on tobacco because of their tendency to discolor the leaves and also because more effective agents have been developed. In spite of these efforts arsenicals are still being used by some farmers, coming mainly from the lower economic, poorly informed groups. It could almost be predicted that as long as these sprays and dusts are found around the farms, accidental poisonings, will continue to be seen. This is borne out by the finding of 41 cases of peripheral neuritis caused by arsenic being diagnosed at Duke and the Dur-

ham VA Hospitals over the past 15 years. Eighteen of these started within the past five years, when use of these compounds would be expected to be at an all time low.

The arsenic can be inhaled, ingested, or absorbed through the skin. Cause of poisoning in many seems to be failure to observe the proper safety precautions such as wearing a mask when spraying. Rural alcoholics comprise another group with a high morbidity rate. This is especially true of those who drink moonshine whiskey, but the causal relationship here is not obvious.

First symptoms are usually related to an irritated digestive tract, and if the patient is seen by the doctor at this phase, a diagnosis of acute nonspecific gastroenteritis is most often made. A few weeks later the peripheral neuropathy slowly begins, and at about the same time the typical hyperkeratotic, hyperpigmented skin lesions appear on the soles and palms. In a few people the neuritis is so overshadowed by multiple other complaints — abdominal pains, respiratory difficulty, fever, mental confusion — that the diagnosis is extremely difficult to make.

In all probability we will continue to see this type of intoxication occurring sporadically. Arsenic-containing compounds are still officially recommended for the control of insects on certain forage crops, pastures, elm, hickory, holly, oak and pecan. They are also advised in apple and peach orchards. Physicians in areas where these materials are used should be alerted to their dangers and made aware of their clinical features.

Robert W. Willett, M.D.

* * *

HOSPITAL CARE FOR ALCOHOLICS

Until comparatively recent times alcoholism was regarded as a manifestation of original sin, and the alcoholic as deserving ridicule or condemnation rather than sympathy. Fortunately he is now coming to be regarded more as a sick person, who needs help.

As long as the first conception prevailed, most general hospitals refused to admit alcoholics. Now that a more tolerant and humane attitude is gaining ground, the ban on admitting patients with the diagnosis of alcoholism is gradually being lifted. There

still remains, however, a great deal of resistance to be overcome on the part of many hospital administrators and staff members.

One of the most important actions taken by the House of Delegates of the American Medical Association at its Seattle meeting was the adoption of a resolution drawn up by the Committee on Alcoholism of the Council on Mental Health, and approved by the Board of Trustees at its June meeting. The resolution urged hospital administrators and staff members to look upon alcoholism as a medical problem and to admit alcoholic patients who were sufficiently cooperative.

The Committee gave the following arguments in support of its resolution:

1. Alcoholic symptomatology and complications which occur in many personality disorders come within the scope of medical practice.

2. Acute alcoholic intoxication can be, and often is, a medical emergency. As with any other acute case, the merits of each individual case should be considered at the time of the emergency.

3. The type of alcoholic patient admitted to a general hospital should be judged on his individual merits, consideration being given to the attending physician's opinion, cooperation of the patient, and his behavior at the time of admission. The admitting doctors should then examine the patient and determine from the history and his actions whether he should be admitted or refused.

4. In order to offer house officers well-rounded training in the general hospital, there should be adequate facilities available as part of a hospital program for care of alcoholics. Since the house officer in a hospital will eventually come in contact with this type of patient in practice, his training in treating this illness should come while he is a resident officer. Hospital staffs should be urged to accept these patients for treatment and cooperate in this program.

5. With improved means of treatment available and the changed view point and attitude which places the alcoholic in the category of a sick individual, most of the problems formerly encountered in the treatment of the alcoholic in a general hospital have been greatly reduced. In any event, the individual patient should be evaluated rather than have general objection on the grounds of a diagnosis of alcoholism.

The final paragraph of the resolution deserves careful reading by all interested in the problem of alcoholism:

In order to accomplish any degree of success with the problem of alcoholism, it is necessary that educational programs be enlarged,

methods of case finding and follow-up be ascertained, research be encouraged, and general education toward acceptance of these sick people for treatment be emphasized. The hospital and its administration occupy a unique position in the community which allows them great opportunities to contribute to the accomplishment of this purpose. It is urged that general hospitals and their administrators and staffs give thought to meeting this responsibility.

An editorial on the November-December number of *Inventory*—the bi-monthly magazine of the North Carolina Alcoholic Rehabilitation Program—states that a 1955 survey of general hospitals in the state showed that “76 per cent of these hospitals would, with some qualifications, accept an alcoholic patient when requested to do so by a member of its medical staff.” This indicates that the physicians in the state who are hospital staff members are in a strategic position to help carry on the educational programs referred to in A.M.A. resolution.

* * *

RESEARCH vs. TEACHING

Science recently has had two interesting letters expressing different viewpoints. In the August 31 issue Dr. J. W. Still of Georgetown University advocated giving science teachers in high school the chance to do research in addition to teaching. Dr. Still believes that “anyone today who has the desire and the energy to master a science well enough to teach it is not likely to be satisfied to teach for long, unless he also has a chance to participate in the pleasures and stimulation of research.”

In the October 12 issue, Dr. J. P. Heath, of San Jose State College, California, objects to the implied concept “that one cannot be an effective teacher unless one worships the deity of research.” He contends that, on the other hand, one may be a better teacher because he is not interested in basic research, and that many excellent research men are not good teachers. “There are individuals in any university who are strictly research persons, not because there is no need for them as teachers, but because they cannot teach. We do not call them second-class researchers for this reason. . . . That there are those who can do both teaching and research well is a marvelous and rather rare thing. But please credit the teacher for his art and stop insisting

that he is only second rate because his only research lies in the challenge of a vast literature."

There is much to be said on both sides of this question. It is possible that a lesson might be learned from the great American game of football. One does not have to be senescent to recall that the "triple threat" players were once the real gridiron heroes. Then intense specialization was carried so far that the players were trained for either defensive or offensive teams, and usually a super-specialist concentrated on kicking extra points and field goals. There has been some reaction from this extreme position, but there are few triple threat players nowadays.

Although neither Heath nor Still mentioned the medical teacher of clinical subjects, more is expected of him than of any other professional man. He is expected to be a successful clinician, an inspiring teacher, a keen research worker, and a good administrator—a quadruple instead of a triple threat player on the medical team.

* * *

APPROACHING SHOWDOWN IN BRITISH MEDICAL PRACTICE

More than eight years ago the National Health Service in Great Britain, was reluctantly accepted by the majority of the members of the British Medical Association. From the beginning it was evident that the overwhelming majority of the doctors who agreed to work under the plan were unhappy in their working conditions. As time has passed, this discontent has become so great that the profession is seriously considering an open break with their employer, the British government.

Most of the doctors who agreed to work under the plan did so because they were given to understand that their compensation would be increased in proportion to increases in the cost of living. Now the Minister of Health is repudiating this agreement. The average capitation fee of \$2.38 per patient per year does not allow the average British doctor a decent living. For example, a young doctor with a wife and four children had a net income of \$2,716 after being in practice six years.

A Negotiating Committee of the B.M.A. has been chosen to confer with the govern-

mental representatives in the hope of persuading them to honor the promise made in the early days of the N.H.S. So far they have gotten exactly nowhere, and serious consideration is being given to advising withdrawal from the N.H.S. One of the most convincing bits of evidence of the present discontent with the situation was given in an editorial in the *British Medical Journal* for January 5: "in recent months the number of doctors inquiring at B.M.A. House about possibilities of practice in the Dominions and elsewhere has increased from an average of three a week to about five a day⁽¹⁾".

Since some readers may think that our government would deal more generously with doctors under a National Health Service than has Great Britain, it is pertinent to repeat part of an editorial⁽²⁾ in the issue of this JOURNAL for September, 1943.

An indication of this may be found in the 1935 volume of the TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA, pages 32 to 34. In the minutes of the Executive Committee meeting held on March 9, 1935, at the Sir Walter Hotel in Raleigh, there is recorded the report of a committee appointed to confer with the FERA. (It may be recalled that these letters stood for the Federal Emergency Relief Administration.) The state administrator of this organization had been authorized to have all employables examined. For the purpose an elaborate blank had been prepared, which included a urinalysis and Wassermann test. For making this examination — which all who saw it agreed was equivalent to a regular five-dollar insurance examination—the doctor was to be paid the munificent sum of fifty cents.

Dr. McBrayer told the Executive Committee that he asked the administrator if the fifty cents was for the clerical work, and said that he would like to know what the doctor was to get. He was informed that the half dollar would have to pay for professional ability as well as for clerical work. The Executive Committee unanimously voted to decline the offer.

This tangible evidence of the estimate placed upon the medical skill by politicians should strengthen our determination to keep American medicine free from political domination.

References

1. Preparation for Action, Brit. M. J. 1:33 (Jan. 5) 1957.
2. Medical Fees Under Political Control, North Carolina M. J. 4:289 (Sept.) 1943.

President's Message

God gives to every man the instincts of humaneness and kindness, some more than others. Man-made influences too often curb and warp those natural instincts. God also gives every man the instincts of selfishness and bigotry. Man-made influences too often exaggerate those natural instincts. Too often our scientific ideas override our humaneness and kindness. Too often our bigotry and selfishness override our inherent thought that a person, though sick, has the ultimate right to make his own decisions. The primary motive of the medical profession is the care of the frailties of sick people, both physical and mental. The secondary motive is the promotion of the profession's prides and principles. The two are too closely entwined to be separated and should both be promoted to the fullest; but still first must come first.

MEDICARE

Public Law 569, the Authorization For Use Of Civilian Medical Facilities for Spouses and Children of Members of the

Uniformed Services went into effect December 7, 1956. By authority of the Executive Committee and President of the State Medical Society, the Committee for Medical Services to the Dependents of Members of the Uniformed Services negotiated a contract with the Defense Department. The schedule of fees followed in general the Blue Shield Doctors' Plan in the \$6000.00 income group.

This contract ends June 30th and is to be renegotiated before that date. The Committee for Medical Services to the Dependents of Members of the Uniformed Services is aware that certain inequities in fees exist. The Committee realized that it was impossible to negotiate a perfect, equitable set of fees.

It is requested that any physicians who finds inequity in any particular fee or who has any suggestions relative to the contract please wire them directly to Dr. David M. Cogdell, Chairman of the Committee for Medical Services to the Dependents of Uniformed Services, 911 Hay Street, Fayetteville, N. C.

- Donald B. Koonce, M.D.

The Early Bird Catches the Worm

The Sears-Roebuck Foundation announces that applications for financial assistance to physicians desiring to enter private practice are currently being processed for the first half of 1957. The deadline for receiving applications is April 1, with final determination on who will receive assistance no later than June 15. All applications are reviewed by a 17-member Medical Advisory Board who use as the sole criteria for loan evaluation the medical need of the community and the financial need of the physician.

This is an ideal time for graduating interns and residents who are interested in entering private practice but lack the necessary funds to apply, since, if chosen, the funds will be available upon graduation in July. A Foundation spokesman urged all interested physicians to apply immediately and not wait for the April 1 deadline to insure proper processing of applications. Applications may be obtained from county or state societies, A.M.A.'s Council on Medical Service, or from the Sears-Roebuck Foundation, 3333 W. Arthington, Chicago, Illinois.

Committees and Organizations

PUBLIC RELATIONS COMMITTEE

*A.M.A. Public Relations Institute
Chicago, August 29-30, 1956*

DAVID G. WELTON, M.D.

CHARLOTTE

Nearly 300 men and women who work with and cherish medical public relations attended the American Medical Association's Public Relations Institute in Chicago, August 29-30. Although the majority were executive secretaries and other professional public relations experts employed by state and county medical societies, there was a good representation of physicians who serve as state officers or public relations chairmen on the state and county levels. North Carolina was represented by James Barnes and William Hilliard from the State Society office, Drs. E. T. Beddingfield of the State Public Relations Committee, W. Wyan Washburn of Boiling Springs, and James E. Hemphill and David G. Welton from Mecklenburg County Medical Society.

This was the fourth such meeting to be held, and was the best of the four in the opinion of most of those attending. During the two-day meeting we learned about the public relations value of local science fairs, various ways of carrying out orientation programs for new members, how medical societies make their voices heard in legislative halls, public service projects; and we saw demonstrations of the planning, producing, and promoting of local radio and television shows.

The theme of this year's institute was "What's Cooking in Medical Public Relations." The stage was set in an old fashioned kitchen with appropriate furnishings, the participants were dressed in aprons and chef's caps, and the titles were flavored accordingly. The prize-winning recipe was: *One Cup Policy, One Cup Performance, One Cup Publicity. Directions: Blend Well, Stirring Constantly, Season to Taste.*

In addition, the newest exhibits prepared by the Bureau of Health Education were set up. Some of these are truly spectacular, particularly those on the eye, the ear, and development of the fetus.

This was an inspiring, beautifully or-

ganized meeting, full of useful information, and not a moment was wasted during the entire two days.

Local Science Fairs

The local science fair is a big story in itself, and should be investigated because of our location in a highly industrialized section of the Southeast. It is not only a public relations "plum," but a wonderful way to get industry and organized medicine working together. Most important of all it is an effective way to stimulate the interest of high school students in science. We are becoming keenly aware of the vast shortage of trained scientists in our country; here is an opportunity to help meet this problem and at the same time gain tremendous prestige.

Hear this: One year ago a leading pharmaceutical company reported that 23 out of every 100 public high schools in the United States offer *neither* physics nor chemistry courses, and 24 offer no geometry. Between 1950 and 1955 the number of science and engineering graduates of American colleges *dropped* more than 50 per cent. High school enrollment *climbed* 16 per cent in the past five years, but the number of qualified science teachers *dropped* 53 per cent.

"Consequently, every group who participates in the science fair project is performing an outstanding service because the continued success of our industries and professions depend on an adequate supply of scientists and technologists.

"A year ago the PR department of the A.M.A. first suggested sponsorship of these fairs by constituent medical societies. In February an A.M.A. progress report listed 15 state and county societies as either sponsoring or taking steps to assist in some manner in the science fairs in their areas.

"As a stimulus to scientifically-talented students to interest them in medicine and associated sciences, the A.M.A. presented four citations at the 1956 National Science Fair to four students with the best exhibits in the basic medical sciences, as judged by a special A.M.A. committee. The recipients of the two 'first place' citations were brought to Chicago in June to display their exhibits in the Scientific Exhibit of the Annual Meeting. This opportunity to encourage high school students throughout the

country by giving them recognition at local levels, and finally before the greatest medical association in the world, should be backed by every county and state medical association—a community service that has few equals.

"This June the A.M.A. House of Delegates went on record that 'the American Medical Association, through its appropriate departments and Councils continue to use every resource at its command to bring the whole of organized medicine into active participation in this worthwhile and constructive program to encourage the youth of our nation to take a serious interest in the field of science as their career.'"

The National Science Fair is administered by Science Service, a non-profit institution for the popularization of science. Costs of conducting the local fairs are covered by cooperating newspapers and other local groups who have interested themselves in the program. (Here is where any county society can get into this project.)

There are now 110 regional fairs affiliated with the national organization; 31,000 exhibits are being shown, and have been seen by one million people.

Science service is a non-profit organization which promotes interest in science among school, high school, and college students, and publishes *Science Newsletter*. They have found that the prime incentive occurs at age 8 to 14. On a local level the county society accepts financial responsibility for the local fair, and helps the teachers and students produce it. The expense is usually small.

"Cooking School": Lessons for the Newcomer

The session held on this subject was devoted to details of how state and county organizations are carrying out orientation programs. Since completely documented information is available on this subject from the A.M.A., it will not be discussed in detail here. Each county medical society, regardless of its size, should establish such a program. It is of great benefit both to relationships among physicians themselves, and to relationships between physicians and other citizens of the community.

The luncheon speaker that noon was Professor David C. Phillips, head of the Department of Speech and Drama of the

University of Connecticut, who gave a marvelous talk (without notes) emphasizing that personal contact between the doctor and the patient, between the doctor and his friends, and between the doctor and his community organizations is the most important *single item* in public relations. Success depends upon the physician's ability to communicate his thoughts in understandable terms. How to do this effectively was demonstrated by Dr. Phillips in a dramatic and clear style. (He will be one of the featured speakers at the Public Relations Conference of the State Medical Society to be held in Charlotte, February 26.) His formula for a successful speech:

1. Think.
2. Study your audience; know your listeners.
3. Select *one point*, and limit yourself to it.

Public Relations Recipe Contest

An entire afternoon was devoted to the presentation of a number of different public service projects which have been carried out by various county and state medical societies. The projects covered were entitled: Family Health Record, Newspaper Advertising Series, Improving Doctor-Lawyer Relationships, PR Potential of Medical Detail Men, Working with the Medical School, Promoting the Opening of a New Headquarters, A Society-Sponsored Safety Program, Medical Society Representation in Health Organizations, Planning a Centennial Celebration, PR Value of Lay Awards, A Poison Control Program, Pre-Med Day for High School Students, Public Relations and Rural Health, New Looks at School Health, Profiting From a Doctor Distribution Survey, Manning Health Exhibits. Printed material describing each of these projects in detail was distributed.

Dr. W. Wyan Washburn of Boiling Springs presented a clever and effective "Flip-Chart" story about the rural health project in his county. At the end of the afternoon he was awarded the "Texas fifth" for the best presentation.

The Legislative Stew: What Are the Best PR Ingredients?

On the staff of the Florida State Society are two men who devote their full time to studying proposed legislation one year be-

fore it comes before the state legislature. Then, during a period of 90 days before the legislature meets, they actually visit every legislator, in company with *his* local physician (or the public relations chairman in that county). They remain on duty while the legislature is in session and arrange for physicians to testify on medical bills.

Indiana and Ohio employ similar methods. In addition, Indiana sends to Washington once a year a legislative party made up of state society officers, district councilors, and public relations chairmen from the state and county levels. They spend two nights and a day in Washington, mostly at social gatherings to which the Congressmen and their wives and staffs are invited. This is an effective way to get on a "first-name basis" with each legislator. Since the future of private practice in the United States may well rest in the hands of our legislators, there is now no question but that we must spend more money, more time, and more effort in personal contact with our state and national representatives. Westbrook Murphy's article in the June issue of the NORTH CAROLINA MEDICAL JOURNAL gives this pointed emphasis. The Indiana program is excellent, but it is just a beginning. Although that state has a smaller population than North Carolina's, it has twice as many physicians.

The session on legislation also included reports of how the chiropractors were beaten in New York, how the chiropractors were beaten in Georgia, and how the naturopaths were eliminated from South Carolina.

What's Cooking for 1957

The session devoted to this subject was one of the most interesting because it predicted the chief public relations problems we face as a profession during 1957. Dr. Ernest Howard, assistant secretary of the American Medical Association, thought that shortages of physicians, the actual or alleged cost of medical care, methods of financing medical care, the A.M.A.'s relations with other national organizations, national legislation, and national political developments would be the subjects requiring close attention in 1957.

Labor's long term objective on a national level is to promote a fixed fee, full payment insurance program throughout the nation,

and to have industry pay for it. Another problem Dr. Howard mentioned was veterans. From the political standpoint, *if the Democrats win*, there will be more social security give-away clauses.

On the local level a big dose of T.L.C. (tender, loving care) was recommended as the first thing to start with. In the opinion of one speaker the most important single quality of good public relations is *reliability*. It was pointed out that in a society of 200 physicians there are 200 wives and at least 400 office aides, resulting in a total of 800 public relations *problems!*

The final afternoon was devoted to a workshop session on local television and radio programs. Milwaukee has had outstanding success with a 30 minute television panel made up of four physicians and a moderator. Each physician is asked to bring eight questions pertaining to his field, and his wife. The wife assists at the switchboard which receives incoming calls. As questions are phoned in, they are written down and handed to the physician who screens them. Some 15 minute programs have been very successful. Detailed instructions on how to present such programs are available from A.M.A. headquarters.

An extremely effective and well prepared film entitled "The Case of the Doubting Doctor" was previewed. This film is about the physician who thinks he gets nothing in return for his A.M.A. and state dues; the movie proves how wrong he is. A showing of this film by each county society is strongly recommended. It may be booked by writing Mr. William Hilliard in our Raleigh office.

Bright Spot on the Insurance Horizon

An optimistic note was sounded by representatives of the Wisconsin State Medical Society, who described an experimental "special service policy" which is in effect in that state. (In Wisconsin, the state medical society itself operates the Blue Shield program.) Forty thousand industrial workers are covered, *and there is no fee schedule*.

Each physician sends in the bill he would customarily charge for that particular procedure in that particular individual case. They have approved fees as high as \$1,000 for prolonged, complicated orthopedic procedures, for example (that is, where special situations justify it).

Each county society has a five-man committee to handle disputes over fees, and in nine months' operation only two serious disputes have arisen, both of which have been resolved by the local committees; 78 per cent of the income has been used for claims and overhead; the operation so far *is a profit*, and the physicians are happier with it than with any plan yet devised in the field of insurance. Another nine months will be required for full evaluation.

Postscript: A public relations chef: "He mixes patience, perseverance, and public service philosophies with energy and enthusiasm. He takes all half baked promotional schemes with a grain of salt."

BULLETIN BOARD

COMING MEETINGS

District Rural Health Conferences: Second District—Washington, February 27; Fourth District—Wilson, March 14; Sixth District—Butner, March 19; Eighth District—Elkin, March 28; Tenth District—Waynesville, April 6.

Duke University Medical Postgraduate Course: Special Review of Hematology—Durham, March 25-27.

Postgraduate Medical Programs, sponsored by the University of North Carolina School of Medicine and the Catawba County and Iredell-Alexander Counties Medical Societies—Hickory, Tuesday afternoons and evenings for six weeks beginning March 5; Statesville, Wednesday afternoons and evenings for six weeks beginning March 6.

Short Course on the Standard Nomenclature of Diseases and Operations—Roanoke, Virginia, March 11-13.

Symposiums on Medico-Legal Problems sponsored by the American Medical Association—Atlanta-Biltmore Hotel, Atlanta, March 15 and 16; Benjamin Franklin Hotel, Philadelphia, March 29-30.

Norfolk County (Virginia) Medical Society, Annual Spring Clinic—Center Theater, Norfolk, March 27.

Medico-Legal Workshop—Amphitheater and Baruch Auditorium, Medical College of Virginia, Richmond, March 29.

American Academy of General Practice, Ninth Annual Scientific Assembly—Kiel Auditorium, St. Louis, Missouri, March 25-28.

Eighth Annual Symposium on Recent Advances in Venereal Diseases—auditorium of the Department of Health, Education and Welfare, Washington, D. C., April 24-25.

DISTRICT RURAL HEALTH CONFERENCES

District Rural Health Conferences for five areas of North Carolina will be sponsored this spring by the Rural Health and Education Committee of the Medical Society of the State of North Carolina, as a part of the Society's expanding efforts in the field of health education.

The meetings, which will coincide with the Society's medical districts, are scheduled for Washington on February 27 for the Second District; in Wilson on March 14 for the Fourth District; at Butner on March 19 for the Sixth District; at Elkin on March 28 for the Eighth District, and at Waynesville on April 6 for the Tenth District.

Each conference is being planned by a local group from the area in which the conference is scheduled in an effort to localize the health and medical information according to the needs of the people for that specific area.

Some similarity for the entire state is expected; however, each conference is expected to present a different approach to the local problem, and program speakers will be drawn from professional and community leaders of the appropriate district.

Top priority will be given to such topics as personal health services, sanitation, farm and home accidents, public health services available, hospitalization insurance, nutrition, immunization programs, and the health implications of industrial expansion.

The 4-H health film, "Better Health the 4-H Way," which was produced under the sponsorship of the State Medical Society, will be shown at each of the five conferences, with an introduction by L. R. Harrill, State 4-H Club Leader. Outstanding 4-H Health winners will be recognized for their health improvement programs.

Communities sponsoring special health activities are being asked to give progress reports so that other community leaders may benefit by their experience and gain new ideas for future health projects.

A two-fold purpose of these rural health meetings, according to the Society's Committee on Rural Health, is, first, to have information given by recognized leaders in the health and medical fields as to present day needs and problems; and, secondly, the pooling of experiences from the various communities engaged in health improvement activities.

Society officials point out that the youth of our schools, clubs, and in our homes takes the lead in many of our group activities, and through this training and stimulation of activity our hopes are lifted for a healthier and safer future in North Carolina.

Members of the State Medical Society's sponsoring committee are serving as conference chairmen, along with farm leaders, extension agents, medical and health representatives, and civic and

community leaders, for program responsibility and local arrangements.

Through this expanded educational program the Medical Society is inviting the public to attend the conference nearest their locality and to participate in the discussions of how communities and individuals may meet their health and medical care needs for the present and future.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

The Division of Hospital and Medical Facilities of the Public Health Service has made a grant to the Department of Preventive Medicine for a study entitled "The Process of Patient Referral to a University General Clinic in a Rural State." The grant period started September 1, 1956, and will carry funds in the amount of \$27,370 the first year, \$29,285 for the second year, and \$29,670 for the third year. Drs. Kerr L. White and T. Franklin Williams are the principal investigators. Dr. Leon Andrews is serving as medical director, Mrs. Aileen Hamrick as social worker, and Mr. Earl Diamond as statistician.

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Three new faculty members have been appointed in the Department of Surgery at the University of North Carolina School of Medicine, according to a recent announcement by Dr. Nathan A. Womack, professor of surgery and department head.

The new faculty members are Dr. Baxter H. Byerly, Dr. Gabriel F. Tucker, Jr., and Dr. Claude A. Tait.

Dr. Byerly is a native of Lenoir. He did his undergraduate and premedical work at the University of North Carolina. His M.D. degree was granted by the Medical College of Virginia in 1953. His internship was served at Duke University. Following his residency training in ophthalmology at the University of North Carolina, he has been appointed instructor in ophthalmology.

Dr. Tucker received his A.B. degree from Princeton University in 1947 and his M.D. degree from Johns Hopkins in 1951. He served his internship at the University of Pennsylvania. Dr. Tucker taught pharmacology at the University of North Carolina during 1952-1953. Following his residency in otolaryngology at Johns Hopkins University, he was appointed instructor in otolaryngology. He is the son of Dr. Gabriel F. Tucker, Sr., emeritus professor of the Graduate School of the University of Pennsylvania School of Medicine.

Dr. Tait attended school at Georgetown University, receiving his M.D. degree in 1952. Following two years of surgical residency at the University of North Carolina, he entered the residency program in anesthesiology which he recently completed. He has been appointed instructor in anesthesiology.

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Dr. Mingeul Figueroa of Santiago, Chile, was in Chapel Hill during the month of January, studying laboratory and clinical methods in pediatric endocrinology with Dr. Judson J. Van Wyk, assistant professor of pediatrics. Dr. Figueroa, whose study in the United States was arranged by The Children's Bureau for the International Cooperation Administration Program, is establishing a department of pediatric endocrinology at the Roberto del Rio Children's Hospital in Santiago, Chile. While in this country, he will also visit the pediatrics departments at the Philadelphia Children's Hospital, Presbyterian Hospital in New York City, and Baylor University Hospital in Houston.

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Census records at North Carolina Memorial Hospital, the teaching hospital of the University of North Carolina School of Medicine, were broken three consecutive days in January.

The old record of 282 patients in the hospital in a single day was established last April.

The patient population of the hospital reached 290 January 8, went to 295 January 9, and reached 305 January 10.

A total of 350 beds are now open for patients, including 54 beds in the Psychiatric Center.

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Two new faculty members have been appointed in the Department of Psychiatry, according to a recent announcement by Dr. George C. Ham, professor of psychiatry and head of the department.

The new faculty members are Dr. Charles R. Starling and Dr. J. Earl Somers.

Dr. Charles R. Starling, B.S., M.D., has been appointed instructor in psychiatry effective January 1, 1957. He completed his undergraduate work at the University of North Carolina and received his M.D. from the University of Maryland School of Medicine in 1952. Following his initial training he served a rotating internship at the University of North Carolina and then entered into the residency training program for three years, completing this work in December, 1956.

Dr. J. Earl Somers, A.B., M.D., has been appointed instructor in psychiatry effective January 1, 1957. Dr. Somers, a native of Burlington, completed his undergraduate work at North Carolina State College and the University of North Carolina and received his M.D. from the Duke University School of Medicine in 1952. Following this initial training he served a rotating internship at the University of North Carolina and then entered into the residency training program for three years. At present he is completing work on a Master of Science degree in anthropology.

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Appointment of Dr. David G. Sharp as professor of biophysics in the School of Medicine has been announced.

Dr. Sharp received his B.S. degree from Rutgers University in 1932. His M.A. degree was awarded

by Duke University in 1937 and his Ph.D. degree by Duke in 1939. He comes to the University of North Carolina from Duke University, where he had taught since 1939.

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A new handbook is being prepared at the University of North Carolina School of Medicine that will explain the new medical examiner system to county officials throughout the state.

The new law, commonly known as the New Medical Examiner Act of North Carolina, went into effect January 1, 1956. The act makes possible a major reform in the manner of investigating deaths of public concern.

Under the new law, a medical examiner must be a physician. Under the old coroner system of North Carolina, the coroner was not required to have medical training and in most cases did not.

The handbook is being prepared by Dr. W. W. Forrest, assistant professor of pathology. It will be released soon.

Dr. Forrest is a native of Winston-Salem and took two years of his medical work here at the University.

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Dr. William P. Richardson, assistant dean for Continuation Education, announces that a series of Postgraduate Medical Programs will be given in Hickory and Statesville during March and April.

The Hickory program will meet on Tuesday afternoons and evenings for six weeks, beginning March 5.

The Statesville program will meet on Wednesday afternoons and evenings for six weeks beginning March 6.

These programs are sponsored by the University of North Carolina School of Medicine, the Catawba County Medical Society, and the Iredell-Alexander Counties Medical Society.

NEWS NOTES FROM THE DUKE UNIVERSITY SCHOOL OF MEDICINE

Two Duke University Medical School doctors have been honored by the national medical journal, *Modern Medicine*.

Dr. Eugene A. Stead, Jr., chairman of the Department of Medicine, is one of 10 American physicians and research scientists who received the journal's 1957 citations for distinguished achievement.

A portrait of Dr. J. Leonard Goldner, associate professor of orthopaedic surgery, appears on the cover of a current issue of *Modern Medicine*, which also carries an article written by him on the causes of low back pain.

Dr. Stead was cited for "distinction as a stimulating teacher and as an investigator of the mechanisms of heart failure and of water and salt balance."

* * *

On January 21 Dr. Wilburt C. Davison completed his thirtieth year as dean of the Duke University School of Medicine. Once described by the famed British physician Sir William Osler as "a new American colt who is wrecking a medical school tradition," Dean Davison has continued wrecking traditions—but always with an eye to making way for improvements.

Dr. Davison was elected dean of the Duke Medical School by the University's Board of Trustees on January 21, 1927. Assistant dean of the Johns Hopkins School of Medicine at that time, he came to a university where both the hospital and medical school were still only in the idea stage. Today the school and its associated hospital comprise one of America's leading medical centers.

* * *

Dr. Wiley D. Forbus, Duke University pathologist, has returned from a four-month study and advisory assignment in the Orient, during which he surveyed medical education in Lebanon, Ceylon, Singapore, Indonesia, the Philippines, Hong Kong and Formosa under auspices of the China Medical Board. Also, under Rockefeller Foundation sponsorship, he studied medical education in India and spent three months as adviser to the Keio University Medical School in Tokyo, Japan.

Dr. Forbus said that medical teaching methods in the Orient are "by and large, those of nineteenth century Europe." Competent teachers are scarce, and research is extremely limited in all but a few schools.

Among the exceptions to this general pattern, he said, in Taiwan (Formosa) National University Medical School, which has "made tremendous progress and is rapidly reaching a position of prominence and importance in the Far East."

* * *

The National Institute of Neurological Diseases and Blindness has awarded \$30,388 for low temperature brain surgery research directed by Dr. Barnes Woodhall, professor of neurosurgery in the Duke Medical School.

Using "artificial heart-lung" apparatus partly developed at Duke, Dr. Woodhall and his associates are investigating the possibilities of drastically lowering the temperature of the brain in order to permit operations now considered impossible.

Another award, the third annual \$5,000 grant made by the National Paraplegia Foundation, is being used for the Raymond C. Henyan Fellowship research project under Dr. Woodhall's direction. The project centers around clinical and research training in paraplegia (paralysis of the lower half of the body) and basic studies upon the spinal cord conducted jointly with Dr. George Margolis, professor of pathology at Duke.

* * *

Research aimed at long-time preservation of living tissue from the human eye is now in progress at the Duke University School of Medicine

under provisions of a U. S. Public Health Service grant.

Centering around the preservation of corneal tissue, the project is headed by Dr. Nicholas G. Georgiade, assistant professor of plastic surgery, and Dr. Frederick W. Stocker, associate professor of ophthalmology.

Other Duke medical faculty members associated with the project are Dr. Duncan C. Hetherington, professor of anatomy, and Dr. Ivan W. Brown, Jr., associate professor of surgery. The \$13,374 research grant was made by the National Institute of Neurological Diseases and Blindness, U. S. Public Health Service.

NORTH CAROLINA HEART ASSOCIATION

Members of the state campaign committee for the 1957 Heart Fund are Allen Wannamaker of Greensboro, vice chairman; S. B. Kittrell of Pine-top, treasurer; Dr. John G. Smith of Rocky Mount, and Dr. Edward S. Orgain of Durham, members at large. The appointments were announced by C. D. Andrews of Greensboro, state chairman.

Mr. Andrews stated that February had been set aside as Heart Month all over the United States. The national Heart Fund committee is headed by Rear Admiral Richard E. Byrd and Kenneth C. Royall, former Secretary of the Army, a native of Goldsboro, North Carolina.

COASTAL PLAIN HEART ASSOCIATION

The Coastal Plain Heart Association sponsored a symposium on cardiology and cardiac surgery in Rocky Mount on February 7. Dr. Eugene A. Stead, Jr., was moderator. Dr. Proctor Harvey, assistant professor of medicine, Georgetown University Medical Center, Washington, D. C., spoke on "Indications for Surgery in Heart Disease — Congenital and Acquired"; and Dr. Charles A. Hufnagel, associate professor of surgery, Georgetown University School of Medicine, presented "A Resume of Recent Advances in Cardiovascular Surgery." Dr. Hufnagel also spoke on "Vascular Reconstruction."

Dr. K. D. Weeks is president of the association.

FIRST DISTRICT MEDICAL SOCIETY

The fourth quarterly meeting of the First District Medical Society was held at the Beechwood Country Club, Ahoskie, on December 12. Dr. Robert A. Ross, professor of Obstetrics and Gynecology of the University of North Carolina spoke on "Obstetric Complications."

The following officers were elected for 1957: Dr. Archie Y. Eagles, Ahoskie, president; Dr. Quinton E. Cooke, Murfreesboro, vice president; Dr. Joe Lee Frank, Jr., Ahoskie, secretary-treasurer.

FORSYTH COUNTY MEDICAL SOCIETY

Dr. Norman Thornton, professor and head of the Department of Obstetrics and Gynecology at the University of Virginia, was speaker at the monthly meeting of the Forsyth County Medical Society held in Winston-Salem on January 8. His subject was "The Early Detection of Gynecologic Malignancy."

RANDOLPH COUNTY MEDICAL SOCIETY

The Randolph County Medical Society held its regular monthly meeting Monday, January 28, at the Randolph Hospital Solarium. The president, Dr. Hugh Fitzpatrick, presided over the meeting.

Dr. Fitzpatrick announced the following committee appointments: Legislative and Public Relations Committee, Dr. T. R. Cleek, chairman, Dr. Frank Edmonson, Dr. Luke Eller, Dr. James Groseclose, Dr. George Johnston, Dr. Ernest Shackelford; Industrial Health, Dr. Jacob Fritz, chairman, Dr. George Joyner, Dr. Frank Sherrill, Dr. Melvin Smith; Grievance Committee, Dr. Charles Owen, Dr. B. B. Dalton, Dr. J. R. Medlin; Rural Health, Dr. H. C. Whims, chairman, Dr. Ann Suggs, Dr. J. T. Barnes, Dr. Rufus Sykes; and Emergency Medical Service Committee, Dr. Hayes M. White, chairman, Dr. Luke Query, Dr. John Cochran, and Dr. B. F. Barham.

It should be noted that the duties of the Grievance Committee are to hear public complaints and grievances concerning ethics and practices of society members and try to effect satisfaction of these complaints. In order for these complaints to be brought to the attention of the committee they should be submitted, in writing, to the chairman. Dr. Charles Owen.

The Society will sponsor weekly radio programs in cooperation with the local pharmacists. The schedule of these general informative programs will be announced later.

ROBESON COUNTY MEDICAL SOCIETY

The monthly meeting of the Robeson County Medical Society was held January 7, at the Lorraine Hotel, Lumberton, North Carolina.

Speaker for the scientific program was Dr. Beverly Raney, University of North Carolina Medical School, whose subject was "Orthopedic Problems in General Practice."

Dr. Max Schiebel, Durham, North Carolina, President of Board of Trustees of the North Carolina Cancer Institute, Lumberton, North Carolina, discussed the proposed change of the Institute to a general hospital for the treatment of indigent terminal cancer patients. The Medical Staff of the Robeson County Memorial Hospital was elected by the Society to serve at the proposed Cancer Hospital.

MEDICO-LEGAL WORKSHOP

The Department of Legal Medicine of the Medical College of Virginia, the Chief Medical Examiner's Office, and the Virginia Society of Pathology and Laboratory Medicine are sponsoring a Medico-Legal Workshop for medical examiners, pathologists, and other interested physicians, on Friday, March 29, from 8:00 a.m. to 4:30 p.m., in the Amphitheater and Baruch Auditorium of the Medical College of Virginia, Richmond, Virginia.

Medical examiners will have an opportunity to make investigations with special references to general examinations of bodies, photographic techniques, and the use of body fluids in medico-legal investigations. They will have a joint session with the pathologists wherein gunshot wounds and special techniques with reference to this subject will be discussed. Pathologists will see practical demonstrations of the medico-legal autopsy techniques to be employed in deaths involving stab wounds, gunshot wounds, and motor vehicle-pedestrian injuries. Stab wounds and gunshot wounds will be inflicted and demonstrated.

The registration fee is \$25.00, and registration is limited. For further information address inquiries to, Geoffrey T. Mann, M.D., L.L.B., chairman, Department of Legal Medicine, Medical College of Virginia, Richmond, Virginia.

NORFOLK COUNTY (VIRGINIA) MEDICAL SOCIETY

The Norfolk County Medical Society will hold its annual Spring Clinic at the Center Theater in Norfolk on March 27.

NATIONAL FOUNDATION FOR INFANTILE PARALYSIS

The men and women who work with poliomyelitis before, during, and after it strikes are not only urging all citizens to take Salk vaccine, but they are taking shots to protect themselves from paralytic polio.

Doctors, nurses, occupational therapists, physical therapists, and medical social workers are among the professional personnel at the New York University-Bellevue Medical Center who typify this move among those who work in the health fields.

The staff at New York University-Bellevue Medical Center and the National Foundation for Infantile Paralysis urges all persons, at least up to 40 years of age, to take the shots. Over 25 per cent of the polio cases in 1955 were among older people, and seven out of every ten respirator cases today are 20 years of age or over.

"Polio cases in the future, though fewer in number, may be concentrated in the upper age group and may be of even more serious conse-

quence than the general level of the past," Dr. Thomas Rivers, Medical Director of the National Foundation, said. "This situation will become more obvious unless the current reluctance of young adults to be vaccinated is overcome."

NEWS NOTES FROM THE AMERICAN MEDICAL ASSOCIATION

A.M.A. Sponsors Doctor-Lawyer Meetings

More than 300 doctors and lawyers in Atlanta, Denver and Philadelphia will get together next month (March) at the invitation of the American Medical Association to discuss mutual problems of the two professions. The day-and-a-half meetings have been scheduled as a follow-up to three similar sessions held in other cities in the fall of 1955. Dates and locations for the Friday and Saturday symposiums are: March 15-16 at the Atlanta-Biltmore Hotel, Atlanta; March 22-23 at the Cosmopolitan Hotel, Denver, and March 29-30 at the Benjamin Franklin Hotel, Philadelphia.

Topics to be discussed include trauma and disease, medical expert testimony, and the medical witness. On Friday afternoon, Dr. Herman A. Heise of Milwaukee will speak on the use and background of scientific tests for intoxication to be followed by a mock trial demonstration. Participants in the mock trial include A.M.A. staff personnel and Lieut. Robert Borkenstein, inventor of the testing device known as the "Breathalyzer."

On Saturday morning, a doctor-lawyer panel will discuss trauma and cancer followed by a question and answer period. After luncheon, Irving Goldstein, a Chicago attorney, author of "Trial Technique" and "Medical Trial Technique," and editor of "Medical Trial Technique Quarterly," will speak on the medical witness and expert medical testimony. Winding up the program will be a showing of the movie, "The Medical Witness," and a question period.

American Medical Association and American Bar Association representatives will be at each meeting. A.M.A. spokesmen in Atlanta and Philadelphia will be Dr. David B. Allman, president-elect, and in Denver, Dr. George F. Lull, secretary-general manager. A.B.A. representatives include—in Philadelphia, David Maxwell, president; Atlanta, E. Smythe Gambrell, immediate past president, and Denver, Thomas M. Burgess, member, board of governors.

Registration fee for each symposium will be five dollars to cover the cost of the luncheon and any published proceedings. Advance registrations should be sent immediately to the A.M.A. Law Department.

New A.M.A. Slidefilm Pinpoints Quack Devices

More than a dozen mechanical quack devices and gadgets play the villain in a color slidefilm with sound just released by the A.M.A. Bureau of Investigation. The 15-minute filmstrip, "Mechanical

Quackery," is supplemented by narrative description of the devices and the fraudulent uses to which they have been put. It is available—on loan—to medical societies, service and fraternal groups, and schools.

Twenty-five sets of the film and record are in the Bureau of Investigation's lending library. Requests should be addressed to the Bureau. (Note: Equipment needed to show "Mechanical Quackery:" A sound slidefilm projector—or a filmstrip projector with a 33 1/3 RPM turntable. Strip has 60 frames. Record is 12-inch.)

New Medico-Legal Film

A new medico-legal film on professional liability will have its premiere Wednesday evening, June 5, during the A.M.A.'s Annual Meeting in New York City. This film, second in a series of six on various medico-legal problems, is being produced by the Wm. S. Merrill pharmaceutical company in cooperation with the American Medical Association and the American Bar Association.

A.M.A. Schedules Area Medical Service Meetings

A number of regional meetings have been scheduled this spring by committees of the A.M.A. Council on Medical Service. Representatives of similar state committees will be invited to each session.

Committee on Maternal and Child Care—March 30-31 in Philadelphia for the New England and Middle Atlantic states. Group will consider proposed guides for perinatal death studies similar to those prepared for maternal death studies.

Committee on Federal Medical Services—March 16 in Reno, Nevada, for the Rocky Mountain and Pacific Coast states; April 6 in New York City for the New England and Middle Atlantic area. Principal topic of discussion will be the A.M.A. policy on care for veterans with nonservice-connected disabilities in Veterans Administration hospitals.

Committee on Aging—April 27-28 in Dallas, Texas, for the Southwestern states. Over-all problems in the field of aging and the role of medicine and medical societies in meeting these problems will be discussed.

Repeat "March of Medicine" Program On Missionary Program

Overwhelming response from physicians, churchmen, television writers and viewers has prompted March of Medicine to repeat its hour-long documentary on missionary medicine Tuesday, March 5, at 9:30 p.m. EST over the NBC-TV network. This latest in the prize-winning TV series, produced and sponsored by Smith, Kline and French Laboratories in cooperation with the American Medical Association, is called "Monganga," tribal dialect for "white doctor." Originally televised November 27, it brought a heavy flow of enthusiastic letters, telegrams, phone calls and personal messages—many asking to see the program again.

A.M.A. Sponsors "Nomenclature" Institute

The American Medical Association recently announced that a short course on the use of the **Standard Nomenclature of Diseases and Operations** in the doctor's office, clinic or hospital will be held March 11-13 in Roanoke, Virginia. Two other institutes have been scheduled in 1957—in San Francisco and Indianapolis. These three-day meetings are conducted by the A.M.A. as a special service to medical record librarians and others using the **Nomenclature** in their work. Tuition is free. Applications should be sent to Mrs. Adaline C. Hayden, C.R.L., associate editor of the **Nomenclature**, at A.M.A. Headquarters, Chicago.

Film on Heredity Available From A.M.A.

The basic story of heredity, sex determination, and sex roles and attitudes within the framework of heredity and environment is dramatically told in a new color film which has recently been added to the A.M.A. Film Library. The 18-minute sound film, "Human Heredity," was designed primarily for junior high students, although older persons also will find it informative. One of the primary purposes of the 16 mm. film is to stimulate group discussion on this extremely important health subject. Medical societies may book the film through A.M.A.'s Council on Scientific Assembly Motion Pictures and Medical Television.

* * *

Doctor-Lawyer Meeting Scheduled for Atlanta

The American Medical Association has invited doctors and lawyers in the South and Southeast to a medico-legal symposium in Atlanta, Georgia, March 15 and 16.

One of a series of three such symposiums to be held during March in various sections of the United States, the Atlanta symposium will feature such subjects as trauma and disease, medical expert testimony and the medical witness. In addition, a mock trial demonstration will take up the introduction in court of chemical tests for intoxication.

Registration fee for the meeting—to be held at the Atlanta-Biltmore Hotel—is \$5.00. This will cover the cost of a luncheon session and a copy of any proceedings that are published. Plans are being made to accommodate 350 attorneys and physicians. However, Mr. Stetler pointed out that advance interest in the symposium is so great that early registrations are advisable.

Applications for attendance, together with the registration fee, should be sent to the Law Department, American Medical Association, 535 North Dearborn, Chicago 10, Illinois.

The American Medical Education Foundation wound up its fifth year of operation with a record total of \$1,072,717 in contributions for the country's 83 medical schools. This represents a 41 per cent increase over the previous year.

MISSISSIPPI VALLEY MEDICAL JOURNAL

The January issue of the *Mississippi Valley Medical Journal* is the big 136-page Annual American Medical Writers' Association Number of the publication. It contains the papers presented at the thirteenth annual meeting and workshop of the Writers' Association at Chicago last September, including the winning essays in the 1956 Mississippi Valley Medical Society Essay Contest—grand total of 24 original presentations. As in previous years, all the A.M.W.A. papers have been incorporated into a booklet which is available for only 25¢ postpaid, from the A.M.W.A. Headquarters, W.C.U. Building, Quincy, Illinois.

THE WORLD MEDICAL ASSOCIATION

Doctors and medical educators of the world will be convened to consider the theme: **Medicine—A Life Long Study** at the Second World Conference on Medical Education scheduled for Chicago, Illinois, August 30-September 4, 1959.

This Conference will be sponsored by The World Medical Association. Collaborating organizations include the World Health Organization, the International Association of Universities, and the Council on International Organizations of Medical Sciences.

The Program Committee under the Chairmanship of Dr. Victor Johnson, Director of The Mayo Foundation for Medical Education and Research, University of Minnesota Graduate School, invites members of medical schools and faculties; member national medical associations and their medical education committees; and organizations and individuals interested and qualified in medical education to submit to it topics and problems that should be considered within the frame of reference of a conference devoted to exploring the continuing education of the doctor after graduation from medical school.

The Conference objective is an exchange of information for the purpose of assisting in raising the standards of medical education of the world. This follows the pattern set by the First World Conference on Medical Education held in London, England in 1953 which devoted its deliberations to undergraduate medical education.

Suggestions should be addressed to: The World Medical Association, 10 Columbus Circle, New York 19, New York.

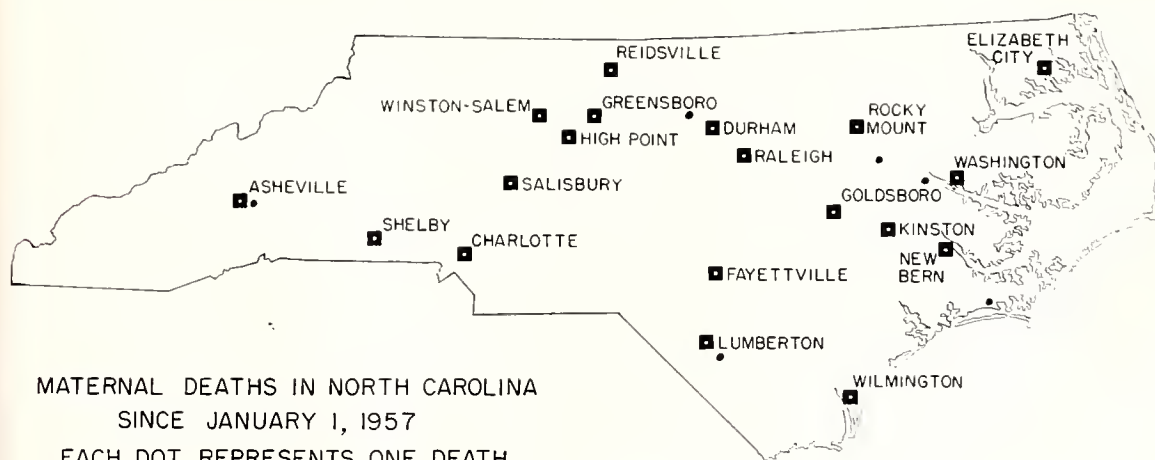
DEPARTMENT OF THE ARMY

Approval of the two-year Residency Program in General Practice of the U. S. Army Hospital, Fort Knox, Kentucky, has been given by the Council on Medical Education, American Medical Association according to information received by the Education and Training Division, Office of The Surgeon General of the Army.

This is the only residency program of general practice conducted by the Army Medical Service, and has 16 participants. The first year of the program is devoted to medicine and medical sub-specialties, including six months in pediatrics; the second, to surgery and surgical sub-specialties, including six months in gynecology and obstetrics.

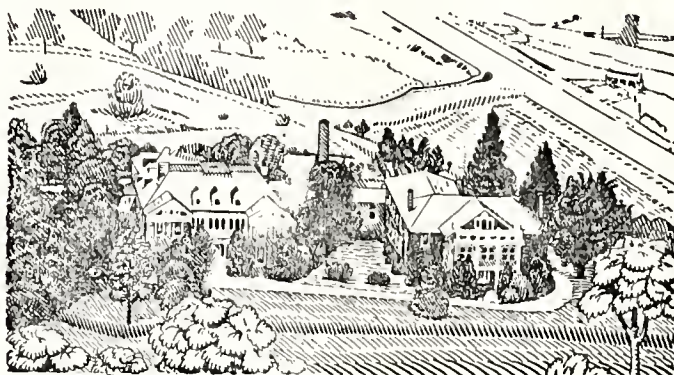
VETERANS ADMINISTRATION

Dr. James B. Chandler, director of professional services at the Veterans Administration hospital in Fayetteville, North Carolina, since 1953, has been appointed manager and director of professional services of the VA hospital in Marlin, Texas, VA announced recently. Before coming to Fayetteville he was chief of the tuberculosis section and assistant chief of professional services at VA hospital in Oteen.



MATERNAL DEATHS IN NORTH CAROLINA
SINCE JANUARY 1, 1957
EACH DOT REPRESENTS ONE DEATH

SAINT ALBANS
A PRIVATE PSYCHIATRIC HOSPITAL
RADFORD, VIRGINIA



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Winston-Salem—624 Nissen Bldg.—Phone 4-8373

Members—National Association Medical-Dental Bureaus

BOOK REVIEWS

Differential Diagnosis: The Interpretation of Clinical Evidence. By A. McGehee Harvey, M.D., and James Bordley, III, M.D. 665 pages. Price \$11.00. Philadelphia: W. B. Saunders Company, 1955.

The most expendable thing in the world today is paper, and a lot of it is found in medical texts. The 665 pages in this book don't fall into that category, a fact which obviously puts it in select company.

For the medical student "Differential Diagnosis" is especially recommended. The gap between the basic science years and clinical work is a broad one, and the student needs all the help he can get. The standard texts, in considering disease by system, provide little scaffolding for the correlation of signs, symptoms, and laboratory data; Dr. Harvey and Dr. Bordley recognize the fact and offer a superb volume about how to do just this.

The authors use the clinicopathologic conference approach, grouping cases in several broad categories. Before separate cases are discussed, the general field is considered—often with excellent tables. The internist, in particular, will enjoy the unknowns which conclude the book.

The book deserves wide circulation and careful study by every reader.

"Observations on Krebiozen in the Management of Cancer. By A. C. Ivy, Ph.D., J. F. Pick, M.D., and W. F. P. Phillips, M.D. 88 pages, plus tables. Price, \$2.50. Chicago: Henry Reghery Company, 1956

Krebiozen, an extract of horse serum, is believed by the authors to be an antitlastic or growth-regulating hormone secreted by the reticuloendothelial system and concerned in the inhibition of normal repair processes at an appropriate time so that a tumor does not result. It is therefore theoretically capable, in their view, of inducing a remission of cancer by means of this growth-inhibiting factor. The book is devoted to observations documented by case histories of the effect of this agent in various sorts of cancer.

This work has been rather controversial, and the favorable results indicated by the authors have not generally been obtained by workers elsewhere. The difficulty of evaluating the effect of any drug in a disorder so chronic and variable in its natural course as malignancy, especially certain types of malignancy such as prostatic cancer, is well known, as is the enthusiasm of the patient (and sometimes of his physician) for any remedy that appears to promise some hope in an otherwise dismal situation. It is doubtful that this book will be of general interest, although the physician interested in cancer research will want to familiarize himself with the observations made by Dr. Ivy and his group.

Your Blood Pressure and How to Live with It. By William A. Brams, M.D. 160 pages. Price, \$2.95. Philadelphia and New York: J. B. Lippincott Company, 1956.

Dr. Brams, winner of an American Heart Association award for a previous book on coronary disease, has written for the layman a simple and readable little book on high blood pressure. The common myths and misunderstandings concerning hypertension are exposed and explained, and the over-all approach is optimistic. The author discusses the various therapeutic programs available in modest detail, but emphasizes that the key factor in treatment is the patient's desire to make a basic change in his high pressure way of life.

The Month in Washington

The broad issue of federal construction grants for medical schools pending before the Eighty-fifth Congress raises again a major question: To what extent is there a shortage of physicians in the United States?

The administration, through Secretary Folsom, maintains that the need for more doctors and research scientists is increasing rapidly as the population rises, as medical science grows more complex, and as research programs are greatly expanded. And, he adds, the need undoubtedly will continue to increase in the years ahead.

Many of these schools already are in a critical financial plight. Mr. Folsom argues, and they need increased private and public funds "just to meet regular operating expenses." Under these circumstances, without further aid, "many schools face almost impossible obstacles in raising funds for construction of new classrooms, laboratories, and other facilities." The Secretary then sounds this warning:

"Unless effective action is taken now toward providing these facilities, the shortage of medical scientists will grow much more acute in the years ahead, and the health of the American people will be retarded."

To solve this problem, the administration wants to broaden the program enacted last year for \$30 million a year for three years to help build and equip laboratories doing research in various diseases. It asked the last Congress for \$50 million a year for five years for both research laboratories

and teaching facilities. The legislators only granted the \$30-million-a-year part. That, says the administration, is not enough.

And to bolster that contention, Mr. Folsom cites the record on the laboratory facilities act: within three months after authorization, requests totaling well over \$100 million were received by the Public Health Service.

But when the committees of Congress—in all likelihood starting with the House Interstate and Foreign Commerce group—launch their hearings, members will want to know just how short the country is of doctors and whether reports of shortages take into account the increased productivity of each physician in the light of new techniques and other medical advances.

* * *

On the opening day of the Eighty-fifth Congress, health legislation emerged as a popular subject. Of the approximately 2,000 bills, resolutions and private measures introduced that day, 70 were marked for study by the Washington Office of the American Medical Association. Experience has shown that about 3 per cent of all measures are of medical importance.

Many of the bills were duplicates of those in the last Congress, while others were revised versions of old favorites. In the latter category were the Jenkins-Keogh bills (again bearing the numbers H.R. 9 and H.R. 10) which would provide tax deferment on money paid in annuity plans, and the Bricker Amendment for keeping international treaties from affecting internal laws of the U. S.

The tax deferment proposal was changed in several respects, the most important being a provision for withdrawal of money from plans in advance of age 65, upon payment of a tax penalty. The key section in the proposed constitutional amendment sponsored by the Ohio Senator states that "A provision of a treaty or other international agreement not made in pursuance of this Constitution shall have no force or effect."

One of the few surprises in the opening day rush to the bill hoppers was a bill introduced by Representative Poage (D., Tex.) authorizing the Secretary of Health, Education and Welfare to make long-term,

3 per cent-interest loans to non-profit hospitals for construction and expansion of facilities, including nurses' homes. Certain sectarian groups have been pressing for just such a plan in lieu of taking federal grant money under the Hill-Burton program.

* * *

Moving to fill two major spots in the Department of Health, Education and Welfare, President Eisenhower has named as Assistant Secretary 36 year old Elliott L. Richardson, a Boston lawyer and son of the late Dr. Edward P. Richardson of Massachusetts General Hospital and Harvard Medical School. Mr. Richardson served at one time as law clerk to Judge Learned Hand and Justice Felix Frankfurter, as assistant to Senator Saltonstall and as consultant to former Governor Christian Herter, now Under-Secretary of State.

To succeed Dr. Lowell T. Coggeshall as special assistant for health and medical affairs, the President appointed Dr. Aims C. McGuinness, a Philadelphia pediatrician who was last in Washington as a clinical consultant to the United Mine Workers Welfare and Retirement Fund. He was responsible for the medical staffing of the Fund's 10 memorial hospitals in three mining states. Dr. McGuinness was dean of the University of Pennsylvania Graduate School of Medicine and one-time director of Children's Hospital of Philadelphia.

Dr. Coggeshall, who returns to the University of Chicago, was praised by Mr. Folsom for his "splendid work on behalf of the health of the American people."

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NORTH CAROLINA

Medical Journal



Vol. 18 No. 3
March, 1957

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QUIETS AN AGITATED COUGH REFLEX

• SYRUP

DOLOPHINE HYDROCHLORIDE

(Methadone Hydrochloride, Lilly)

more effective in smaller doses than opium derivatives

Dosage: 1 teaspoonful; repeated only when necessary.

Palatable, cherry-flavored Syrup 'Dolophine Hydrochloride,' 10 mg. per 30 cc., is supplied in bottles of one pint and one gallon.

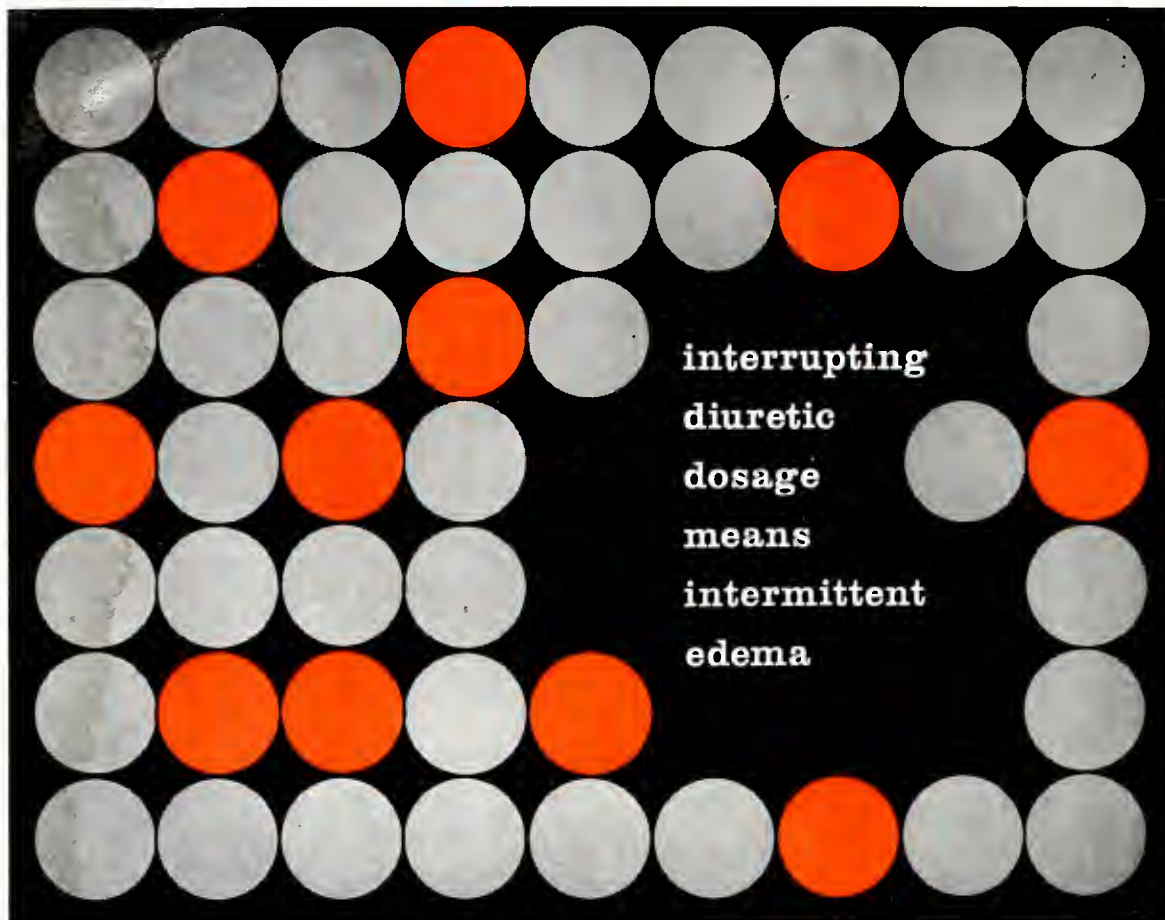
• Narcotic order required.

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PATIENTS IN FAILURE NEED AN ORGANOMERCURIAL

Diuretics needing "rest periods," whether enforced by dosage restriction to once daily, or by omission to alternate days, inevitably fail to achieve sustained control of edema.

The organomercurials never require interruption of dosage to prevent refractoriness and can maintain patients continuously in the edema-free state.

TABLET

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a standard for initial control of severe failure



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BRAND OF MERALLURIDE INJECTION

NORTH CAROLINA MEDICAL JOURNAL

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THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

VOLUME 18

MARCH, 1957

NUMBER 3

Cushing's Syndrome Due to Masculinovoblastoma

A Case Report

W. RALPH DEATON, JR., M.D.

and

ARTHUR FREEDMAN, M.D.

GREENSBORO

Cushing's syndrome, as first described in 1932⁽¹⁾, included painful adiposity of the face and trunk, hypertrichosis, sexual dystrophy, hypertension, and impaired glucose tolerance. Cushing attributed the etiology of the symptom complex to a basophilic adenoma of the pituitary, and demonstrated such a lesion in 6 of 8 cases that came to autopsy. It has since been shown that this syndrome is much more apt to be produced by an adrenal cortical tumor, or adrenal cortical hypertrophy; in rare instances arrhenoblastomas, thymomas, and tumors of the pineal gland have produced Cushing's syndrome. The case to be reported was unique in that the etiologic agent was a benign tumor of adrenal tissue that was ectopically located in the left ovary.

Case Report

A 44 year old housewife was referred for investigation of a persistent headache of five weeks' duration. She was found to have typical Cushing's syndrome without objective evidence of an intracranial tumor. A consultant in ophthalmology found a refractive error; when this was corrected with glasses the headache immediately disappeared. Because of other obvious difficulties, however, she was hospitalized for further studies.

She dated the onset of her illness to about the time of the menarche, when she started to gain weight rapidly. She remembered weighing 182 pounds when married at the age of 17. At age 19 she became pregnant, but subsequently aborted and

failed to menstruate for seven years. She was then given some type of injection for the amenorrhea and began to menstruate normally. She became pregnant, and delivery was effected by cesarean section because of her small pelvis. Within a few months she again became pregnant and another cesarean section was performed. When she became pregnant the fourth time, a therapeutic abortion was performed, a third cesarean section being thought inadvisable.

At about this time (age 30) she began to notice hair growing on her chin, but it was easily removed with tweezers and did not require shaving. Concurrently, she began to have malaise, fever, and urinary frequency. She was found to have pus and sugar in her urine, and was treated with a 1,000 calorie diet. She remained on this diet for four months, lost a great deal of weight, and began feeling quite well. Frequent tests of urine disclosed no sugar. Consequently, she deserted the diet, only to start gaining weight and reaching 265 pounds in a few years.

At the age of 40 she began having hot flashes and shortly ceased menstruating. Soon after this she noticed an increase in the growth of hair on her face, but a recession of her hairline. Because of these symptoms her physician obtained consultations with a gynecologist and an endocrinologist. It was postulated that she had multiple endocrine abnormalities, due probably to an adrenal masculinizing tumor or possibly to an ovarian tumor. (A pelvic examination was grossly inadequate because of the patient's adiposity.)

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Fig. 1. Preoperative (left) and postoperative (one year) views. Note differences in hairline, facial contour, expression, beard, and mustache.

Because of the seemingly multiple endocrinopathies, it was felt that operative exploration was not indicated. Her general condition was explained to her, with the suggestion that she should continue on a 1,200 calorie diet and learn to get along with her troubles. She continued to become more bald while the facial hair became more pronounced. Also, hair began to grow over her entire body. Her voice changed so that she became unable to sing in the choir as she had done formerly. She also noted a reduction in her hip circumference despite abdominal obesity. Her blood pressure was found to be as high as 200 systolic, 130 diastolic, and exertional dyspnea was present occasionally.

The family history was of interest in that one aunt had diabetes. Virtually all the family were obese. The mother had had tuberculosis; the patient had had several negative roentgenographic chest examinations.

Physical examination

The blood pressure was 150 systolic, 85 diastolic, the respiration 12 per minute, the temperature 98.8 F., and the pulse 80. The patient was a partially bald, extremely obese white woman. The face had a masculine contour, with a heavy beard and mustache (fig. 1A). The neck was short and fat, with a marked cervicothoracic fat pad (buffalo hump). While the anterior abdominal wall was pendulous, with an apron of fat hanging well over the upper legs (fig. 2), the gluteal areas were quite slender. No masses or tenderness could be made



Fig. 2. Preoperative views. Note smallness of limbs, but spade-like fingers, receding hairline, cervicothoracic hump, abdominal apron, abdominal striae, and lack of buttocks.

out in the abdomen. There were purple striae over the abdomen and hips. The clitoris was enlarged to approximately three times normal size. On vaginal and rectal examination no organs could be identified, owing to the patient's adiposity. The arms were rather heavy, but the legs were surprisingly small and covered with a heavy growth of hair.

Accessory clinical findings

Laboratory studies were as follows: The urine was negative except for 1+ albumin. Hemogram showed 12.7 Gm. of hemoglobin, 4,100,000 red cells, and a normal white cell count and differential. The total cholesterol was 185 mg. per 100 cc., serum alkaline-phosphatase 3.2 Bodansky units, phosphorus 5.88 mg. per 100 cc., and calcium 8.5 mg. per 100 cc. Glucose was 152 mg. per 100 cc., and blood urea nitrogen 14.5 mg. per 100 cc. Urinary 17-ketosteroids were 10.5 per

24 hours (within normal range). Serum chloride was 98.5 mg. per 100 cc., and carbon dioxide 45 volumes per cent. A roentgenogram of the chest was negative except for slight enlargement of the heart, with left-sided preponderance. Roentgenograms of the skull were negative. Intravenous pyelograms showed no abnormality. An electrocardiogram showed definite evidence of left ventricular strain.

Hospital course

Because it seemed probable that this woman had either an adrenal tumor or hypertrophy of the adrenals, it was thought wise to offer her surgical relief. She readily accepted. It was planned to explore the left adrenal, using a transthoracic approach in view of her obesity. It was anticipated that if no abnormality were present on the left, the right adrenal, and ovaries, might be palpated through the same incision. If no tumor were present, a diagnosis of adrenal cortical hypertrophy would be made and approximately 80 per cent of the left adrenal would be removed, with the expectation of removing the entire right adrenal later.

At operation the left ninth rib was resected subperiosteally and the left adrenal visualized through an incision in the diaphragm. No abnormality was noted except that the gland seemed rather small. The right adrenal seemed normal to palpation. Further abdominal exploration revealed a large tumor of the left ovary. The right ovary was atrophic. As it was entirely possible that this tumor of the left ovary could be a benign cyst and have nothing whatsoever to do with the patient's disease, it was believed best to resect approximately 80 per cent of the left adrenal while it was exposed. Thus if the ovarian tumor proved innocent, first-stage therapy of adrenal cortical hyperplasia would have been accomplished and a second operation on the left adrenal would not be necessary. Accordingly, 80 per cent of the left adrenal was resected and the incision closed. A lower left abdominal incision was made and the left ovary and tumor were amputated. Immediate section showed it to be a solid tumor of the left ovary. As this patient was past the menopause, the right ovary was also removed. The wound was then closed and the patient returned to her room in excellent condition. She reacted promptly

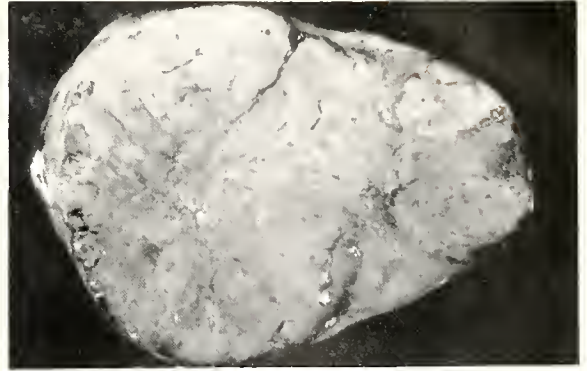


Fig. 3. Cross section of left ovary and tumor. The ovary is that small area of tissue to the right.

from the anesthesia, being able to turn and feed herself on the day of operation.

The blood pressure remained elevated for 48 hours and then decreased to about 130 systolic, 80 diastolic. Because of this stabilization, cortisone, which had been started preoperatively as a prophylaxis, was discontinued. Twelve hours later she complained of weakness and nausea. Her blood pressure had slowly increased to 160 systolic, 90 diastolic. Administration of cortisone immediately evoked great improvement in her general well-being. The blood pressure finally became stabilized at 140 systolic, 90 diastolic, and cortisone was discontinued in stages.

Within two weeks after the operation she noticed that hair was beginning to grow back on her head and that her beard growth was less. She was discharged from the hospital on the fourteenth postoperative day.

Follow-up

Six weeks later the patient returned to work in a weaving mill, and has worked steadily since then. At the present time she is still regaining her scalp hair (fig. 1B), her facial contour is more feminine, her voice has reverted to alto, she weighs 175 pounds, all hair has disappeared from the trunk and limbs except for a feminine escutcheon, and the clitoris is about one-half of its preoperative size. She still shaves occasionally. The cervicothoracic fat pad is unchanged. All purple striae have disappeared.

Pathologic report

Gross Description: The specimen was an irregularly ovoid piece of tissue measuring 6 by 5 by 4 cm. and weighing 60 Gm. The



Fig. 4. Photomicrograph, low power, showing capsule of tumor.

external surface was pale yellowish-gray, smooth, and glistening. Several slightly irregular nodules protruded from the surface. On one margin there was a roughened area which measured approximately 1 by 0.8 cm. and showed the cut surfaces of a number of blood vessels. On section, the mass consisted of 20 per cent pale gray ovarian tissue and 80 per cent bright yellow nodular tissue resembling an adrenal gland (fig. 3).

Microscopic description: Multiple sections of the tumor revealed a remarkably uniform picture. There was a fibrous capsule (fig. 4). The tumor was composed of quite uniform large cells with small round nuclei and abundant foamy colorless cytoplasm (fig. 5). Mitotic figures were not identified. Occasional foci of smaller cells were present, differing from the others only in that there was less lipid in the cytoplasm. At one margin normal ovarian tissue showed tumor extending into it, but none of the histologic criteria of malignancy were present.

Diagnosis: Masculinovoblastoma. (The pathologic material was subsequently reviewed by the Registry of Ovarian Tumors of the American Gynecological Society and the diagnosis affirmed.)

Comment

Cushing's syndrome in the female classically consists of abnormalities due to changes in the sex hormones, electrolytes, sugar metabolism, and blood pressure. In the first group are found baldness, growth of beard, voice change, enlargement of the clitoris, and cessation of menses. Electro-

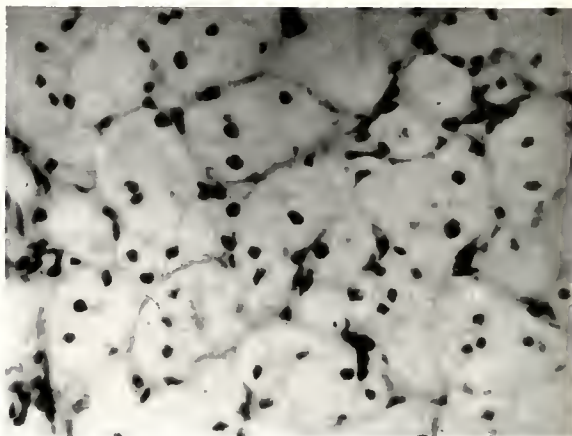


Fig. 5. Photomicrograph, high power, showing the uniformity of the large cells, with abundant foamy, colorless cytoplasm, and small nuclei.

lyte changes particularly include those related to hypocalcemia and osteoporosis. Hyperglycemia and glycosuria are found quite consistently, and finally hypertension, cardiomegaly, and nephrosclerosis complete the diagnostic criteria. Additional characteristics of these patients sometimes include a buffalo hump, purple striae, and a girdle type of obesity. The present case presented virtually all these diagnostic characteristics, and the diagnosis of adrenal cortical hyperfunction was, therefore, not difficult to make.

Masculinovoblastomas are rare tumors. Kepler⁽²⁾, in 1944, found 13 definitely proven cases in the literature; Blewett⁽³⁾, in 1953, could find only 15 more cases, for a total of 28. The tumors are benign, and are generally believed to arise from adrenal rests located at the hilum of the ovary. There is, however, a lack of uniformity in this belief, as evidenced by the many synonyms that have been applied (adrenal rest tumor, hypernephroma of the ovary, luteoma, lutinoma, interstitialoma, masculinizing lipid cell tumor of the ovary, and adrenal-like ovarian tumor). The term masculinovoblastoma was suggested by Rottino and McGrath⁽⁴⁾, in an effort to describe the biologic properties of the tumor, yet distinguish it from the arrhenoblastomas.

Summary

A case of Cushing's syndrome due to a masculinovoblastoma is described. Following excision of the tumor there has been regrowth of the scalp hair, loss of the body hair, reversion of the voice to normal, loss

of weight, regression in the size of the clitoris, and disappearance of purple striae.

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A Review of the First 1000 Consecutive Maternal Deaths in North Carolina
Part VI — Pulmonary Embolism

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Of the first 1,000 consecutive maternal deaths in North Carolina, a total of 74 were attributed to pulmonary embolism. Numerically, this condition is the third leading cause of maternal deaths in North Carolina, being slightly ahead of infection. This rate is considerably higher than that usually reported. Many reports on maternal mortality include embolic deaths under infection, since they are often associated with thrombophlebitis. In this state, however, the majority of these 74 deaths were not related to puerperal infection or thrombophlebitis. Autopsies were performed on only 8 patients in the group, the diagnosis in the remaining cases being made on clinical grounds alone. In 18 cases the diagnosis was considered questionable by the Maternal Welfare Committee. Since, however, no other diagnosis could be established; since the clinical record was strongly suggestive of pulmonary embolism, and since this diagnosis had been made by the attending physician, the Committee attributed death to this cause. Seven of the cases were thought to be due to amniotic fluid embolism rather than vascular embolism. These will be discussed later.

Racial Distribution

In reviewing the general characteristics of the patients in this group, it is noted that 65 per cent of the patients were white. This is a marked increase over the 41 per cent white maternal deaths in the entire

group, and approximates the percentage of white deliveries in the state. The age and parity did not differ significantly from that noted in the other groups.

Time of Death in Relation to Abortion or Delivery

Fatal pulmonary embolism occurred 8 times following spontaneous abortion, 4 times following therapeutic abortion, and twice following surgery for ectopic pregnancy.

Table 1
Outcome of Pregnancy

Previaible	
Abortion—spontaneous	8
Abortion—therapeutic	4
Ectopic	2
Total	
	14
Viable	
Antepartum	4
Intrapartum	2
Postpartum	54
Total	
	60

Four deaths occurred *ante partum*, before the onset of labor, all near term. There were 2 intrapartum deaths due to amniotic fluid embolism, and 54 postpartum deaths of which 5 occurred immediately after delivery and were thought to be due to amniotic fluid embolism.

In 3 cases one or more emboli occurred prior to the fatal attack. Death was instantaneous or occurred within 20 minutes in the remainder. In the previaible group, 9 of the deaths followed some operative procedure. Two followed hysterotomies for therapeutic interruption of pregnancy, 2

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followed laparotomy for ectopic pregnancy, 1 followed a colostomy for intestinal obstruction, and 4 followed dilatation and curettage. The remaining 5 followed non-operative spontaneous abortions.

Table 2 Time of Death in Relation to Abortion or Delivery		
	Previable	Viable
Antepartum		2
Postpartum (or abortal)		
24 hours or less	4	15
24 to 72 hours	2	4
3 to 14 days	7	24
14 days and over	1	8

The two antepartum emboli occurred at 7½ and 9 months' gestation, respectively. A large number of the postpartum emboli occurred within the first 24 hours, many within a few hours of the delivery. (The type of delivery will be referred to later.) The majority occurred from 3 to 14 days *post partum*, and 8 occurred later than 14 days after delivery.

Obstetric Procedures

In preparation for delivery 13 procedures were used, separately or in combination, the most common being rupture of the membranes (6 cases). There were 3 pituitary inductions, 2 manual dilatations of the cervix, 1 insertion of an intrauterine bag for induction, and 1 medical induction. The type of delivery may be seen in table 3.

Table 3 Type of Delivery	
Spontaneous—vertex	33
Assisted breech	2
Low forceps	7
Mid-forceps	1
Version and extraction	2
Cesarean section	6
Total viable deliveries	51

There were 16 operative deliveries, which, added to the 9 operative cases in the previable group, make a total of 25 operative procedures out of 65 pregnancies which were terminated at either viable or previable stage. In other words, some operative procedure was involved in 40 per cent of the cases in which pregnancy was terminated. The anesthetic agents used were varied and appeared not to be significant.

Antecedent Complications

In reviewing the deaths due to pulmonary embolism, the outstanding feature noted was the high incidence of serious antecedent

complications. Fifty-seven patients exhibited one or more serious obstetric complications. Excluding those who had amniotic fluid emboli, this leaves only 10 patients who had no known complication. The complications are listed in table 4.

Table 4 Antecedent Complications		
Hemorrhagic complications		23
Abortion and ectopic pregnancy	14	
Premature separation	5	
Postpartum hemorrhage	2	
Retained placenta	2	
Toxemia		15
Venous complications		15
Thrombophlebitis	10	
Thrombosis	5	
Dehydration and exhaustion		4
Total		57

Obstetric hemorrhage, toxemia, and venous complications occurred in all but 4 of the patients. These 4 were patients who were in labor for a long period of time, or, when seen, were dehydrated and in exhaustion after severe nausea and vomiting. The 5 patients with premature separation of the placenta also had toxemia, and 4 of the patients with thrombophlebitis had pelvic peritonitis. In 2 cases of retained placenta, the placenta was removed manually.

Preventable Factors

As expected, a large percentage of the cases were considered nonpreventable; 31 of the 67 cases of vascular pulmonary embolism were considered nonpreventable by the committee. In the remaining 36 cases, one or more avoidable factors were present.

Operative procedures

The most commonly encountered factor was an operative procedure or delivery which was either not indicated, was ill advised under the circumstances, or was poorly selected. Eleven cases fell in this category. The youngest patient in the group, aged 14 years, was admitted twice to the hospital for persistent severe vomiting in early pregnancy. Shortly after the second admission, and before dehydration was corrected, the patient was subjected to a therapeutic abortion. The means selected for the interruption was manual dilatation of the cervix and the insertion of a rectal tube in the uterus. Pelvic infection developed and was followed by an acute pulmonary embolism and death on the seventh day.

In another case a cesarean section was

carried out for premature separation of the placenta, with a dead baby, a hemoglobin of 50 per cent, minimal bleeding, and no evidence of shock. The patient was a multipara. Sterile pelvic examination was not done, and no transfusions were given prior to the cesarean section. The amount of bleeding and the fact that the patient was a multipara with premature separation of the placenta certainly seemed to indicate that rupture of the membranes in anticipation of early vaginal delivery and blood replacement would be the usual selection of management. In none of the therapeutic abortions did the indications seem adequate to justify the procedure.

Home management

The second commonly encountered factor was the management in the home of complications which should have been referred to the hospital, or home deliveries in which infection occurred presumably because of errors in technique. A 35 year old woman, para iv, had a 36 hour labor in the home. During the course of labor she complained of pain in the right calf and thigh. The baby died during labor. The patient was delivered at home by forceps and episiotomy. The pain in the leg continued *post partum*, and on the second day was diagnosed as thrombophlebitis. The patient was treated at home with bedrest and elevation of the leg, but on the eighteenth day had a pulmonary embolism and died. In 2 deliveries performed in the home, one by a midwife, the placenta was manually removed. In both cases pelvic infection set in and was followed by pulmonary embolism and death. Embolic deaths associated with toxemia have been discussed previously⁽¹⁾.

Numerous other factors were noted in this group of deaths. One patient was seen at home with premature separation of the placenta and early labor. Manual dilatation of the cervix, version, and extraction were carried out with considerable loss of blood. The patient was allowed to remain at home, and no transfusions were given. A fatal embolism occurred on the third postpartum day.

An interesting and unusual case was that of a 17 year old white primigravida who manifested early toxemia in the eighth month of pregnancy, with a blood pressure of 140 systolic, 90 diastolic, and a trace of albuminuria. On weekly visits thereafter

the blood pressure was in the region of 170 systolic, 120 diastolic, with 2 to 3 plus albuminuria. She was treated at home with liquid diet and salts. Pain in the upper abdomen developed, and she was given an antacid and morphine. She vomited all night, was admitted to the hospital the following morning in a state of shock and cyanosis, and died shortly thereafter. Autopsy revealed a small premature separation of the placenta and massive pulmonary embolism. About seven-eighths of the lung was involved in the hemorrhagic infarct.

Improved Management of Complications

Any reduction in the number of maternal deaths from pulmonary embolism will be obtained by better management of some of the commonly encountered complications of pregnancy, such as hemorrhage and toxemia. Patients having obstetric hemorrhage, regardless of the time during pregnancy at which it occurs, should be hospitalized immediately. Adequate and immediate replacement of the blood loss is essential. Of the 24 patients whose pregnancies were complicated by hemorrhage in this group, only 3 received any blood whatsoever. Early recognition of toxemia and hospitalization of the patient will result in improvement in the care of this complication. As in the hemorrhagic complications, these patients should be hospitalized as emergencies and aggressive medical treatment of the toxemia carried out. These patients tolerate surgical procedures very poorly. If it becomes necessary to terminate the pregnancy, great care must be exercised to select that method of interruption which offers the least danger to the patient. The initial treatment of toxemia is always medical. Many of the patients in this group have been subjected to unnecessary or poorly selected operative procedures. Reduction in the frequency of pulmonary embolism can be effected if operative interference is restricted to those cases in which it is clearly indicated. If abnormal, fluid and electrolyte balance should be restored to normal prior to any obstetric procedure. Finally, early ambulation seems to be extremely effective as a preventive.

Following delivery or abortion every patient should be carefully watched for evidence of thrombophlebitis, and the legs should be examined daily. Any unexplained elevation of temperature and any unusual

rise in pulse rate should also be viewed with suspicion. In the event that thrombophlebitis occurs, the application of heat to the extremity, elevation, and anticoagulants usually produce a satisfactory response. Antibiotics are indicated for those patients who show obvious pelvic inflammation or evidence of extensive thrombophlebitis. The use of vasodilators and various nerve blocking techniques is of considerable value in producing symptomatic relief and in shortening the course of the disease. Ligation is indicated if the thrombophlebitis progresses. If

a nonfatal pulmonary embolism occurs, intensive anticoagulant therapy is indicated. Consideration must be given to high venous ligation, extending in some cases to the inferior vena cava. These patients also need considerable supportive treatment in addition to the usual measures previously outlined for the treatment of the thrombophlebitis.

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Simultaneously Occurring Placenta Praevia and Placenta Accreta

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Placenta accreta is defined as that pathologic condition in which the chorionic villi are directly attached to the myometrium, owing to partial or total absence of the decidua basalis. According to Aaberg and Reid⁽¹⁾, placenta accreta is classified as (1) total, involving the entire placenta; (2) partial, involving one or more cotyledons; and (3) focal, involving part of a single cotyledon. When the chorionic villus invades the myometrium, the condition is known as placenta increta; if perforation occurs, the condition is known as placenta percreta. Because of the definition, the diagnosis of placenta accreta is frequently restricted to the complete type. The partial and focal types are not uncommon, but are more dangerous because of hemorrhage.

Irving and Hertig⁽²⁾ reported an incidence of 1 in 1,956 deliveries, but Kraul⁽³⁾ found only 3 in 60,000 deliveries. The reported incidence of placenta accreta complicating placenta praevia appears to be rarer than these statistics would indicate. Less than 40 cases have been reported to date. The largest series is that of Kistner, Hertig, and Reid⁽⁴⁾, totaling 9 cases over a 14-year period. According to Israel, Siegel, and Rubenstone⁽⁵⁾, many obstetricians feel that some degree of placenta accreta is a natural concomitant of placenta praevia. This would seem to imply that placenta accreta in association with placen-

ta praevia is not as rare as reported cases would lead us to believe. Probably more cases would be reported if pathologic studies were routinely made in cases of placenta praevia. This hypothesis seems more plausible than that the condition is so extremely rare.

The treatment of choice is either total or subtotal hysterectomy, depending upon the technical difficulty involved, which can be ascertained only at the time of operation. Of the 30 reported cases by Kistner, Hertig, and Reid⁽⁴⁾, 11 patients were delivered vaginally, and these had the largest mortality. Nineteen were delivered by cesarean section, at which time the combined condition was diagnosed. Fourteen of the 19 patients had subtotal hysterectomies, with recovery, and of the remaining 5 who were treated by intrauterine packing, 2 died later from hemorrhage. Two patients whose cases were reported later^(6,7) had total hysterectomies, with complete recovery.

The patient in the following case was delivered by cesarean section because of diagnosed placenta praevia, followed by a total hysterectomy as a result of profuse bleeding and suspected placenta accreta.

Case Report

A 26 year old white woman, gravida ii, para i, was admitted to Rex Hospital, Ra-

leigh, on January 26, 1955, during the twenty-fifth week of gestation, because of painless vaginal bleeding. Her last normal menstrual period had been July 14, 1954, and her estimated date of delivery was April 21, 1955. The past history was essentially negative. Her health between the two pregnancies had been normal except for slight hypothyroidism, for which she was given thyroid. This pregnancy had been uncomplicated until the night before admission, at which time she had had several loose stools, with severe abdominal cramping that continued the next day. During this episode she began having vaginal bleeding without pain. She was sent to the hospital immediately with an admitting diagnosis of (1) diarrhea due to virus infection, and (2) placenta praevia.

Physical examination revealed a uterus consistent with 25 weeks' gestation. The fetal heart was not audible, peristaltic waves were marked, and bright red blood was oozing from the vagina. The blood pressure was 116 systolic, 78 diastolic. The hemoglobin was 9 Gm. (58 per cent), the red blood cell count 3,000,000, and the white blood cell count 7,050. A urinalysis was negative.

X-rays of the soft tissues showed a single fetus at 6 months, situated in the left occiput anterior position. The fetus was riding rather high, and appeared to be displaced posteriorly. Low anterior praevia was not ruled out by this study.

Hospital Course

The vaginal bleeding stopped shortly after admission, and the patient was treated conservatively by absolute bed rest and Streptomycin for diarrhea. She continued to have a brownish vaginal discharge for five days.

On the twentieth hospital day the patient's physician, a general practitioner, referred her to my service for further treatment and delivery. At the time of transfer she was in good physical condition except for a low hemoglobin. Examination revealed the size of the uterus to be consistent with a 6½ to 7 months' pregnancy. The fetal heart rate was 140; the vertex was floating. There was a very slight vaginal discharge.

On the twenty-fourth hospital day the patient began bleeding again. The blood pres-

sure was 100 systolic, 70 diastolic, the fetal heart rate 140. Five hundred cubic centimeters of whole blood was given. Brownish spotting occurred off and on for the next 10 days. The hemoglobin at this time was 10.5 Gm. (68 per cent). Urinalysis revealed 1 plus albumin.

On the forty-sixth hospital day bright red bleeding began. The blood pressure was then 120 systolic, 72 diastolic, the fetal heart rate 136, and the pulse 90. When the bleeding had continued for approximately two hours, a transfusion of 500 cc. of whole blood was started and a classical cesarean section was carried out under spinal anesthesia (Pontocaine). A 6 pound 5 ounce living female infant (33 weeks' gestation) was delivered. Examination of the lower uterine segment revealed a total placenta praevia. Since the placenta did not separate spontaneously, manual removal was attempted with some difficulty, especially a small area on the right portion of the lower uterine segment. This small area was thought to contain some myometrium. Apparently the entire placenta was removed, but in several pieces. The diagnosis of placenta accreta was made with some question. Hemorrhage was profuse during manual removal, and the patient was beginning to show signs of shock. The blood pressure dropped to 70 systolic, 50 diastolic. Since the diagnosis was questionable and the patient had only one other child, it was decided not to do a hysterectomy. Vaginal bleeding was excessive following abdominal closure, so the uterus and vagina were packed and the patient watched on the operating table. Whole blood was given continuously throughout the operation.

After 45 minutes bleeding occurred through packing; so a total hysterectomy was done under Pentothal, Anectine, and cyclopropane anesthesia. The packing was removed from the vagina after the uterine vessels were clamped. Three thousand cubic centimeters of whole blood was given during and between operations. The patient made an uneventful recovery, and was discharged with the baby on the ninth postoperative day.

Pathologic examination

Gross examination of the uterus showed the site of placental attachment in the lower segment anteriorly. This site was

marked by a shaggy appearance and some variations in color and consistency of the tissue extending through approximately three fourths of the thickness of the wall.

Multiple sections through the site of placental attachment were examined microscopically. In some of these sections there was a thin layer of decidual tissue, with Nitabuch's membrane separating masses of chorionic villi from the myometrium. A few sections revealed trophoblastic cells in the subjacent myometrium, and chorionic villi in venous sinuses, which is not unusual. In at least one area, however, even the thin layer of decidual tissue and Nitabuch's membrane is lacking, and chorionic villi are found in direct contact with myometrium, interpreted as representing focal placenta accreta.

These sections were submitted to the Department of Pathology of a nearby teaching center for further study or confirmation. Their interpretation: "Placenta accreta, focal, postpartum uterus."

Etiology

Since placenta accreta results from absence of normal decidual reaction in endometrium, as might follow complete removal of endometrium by vigorous curet-

tage, scar formation, or other factors resulting in destruction of this coat, no likely cause is apparent in the past history of this patient, including abortion or inflammation involving the uterus. Thus this case must fall into the group in which decidual variation is due to the development of the placenta in an abnormal location¹¹.

Summary

Another case representing a placenta praevia with focal placenta accreta necessitating a total hysterectomy for control of hemorrhage is reported.

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It is not possible that psychiatry has allowed itself, either by its own volition, or from a lack of self-assertiveness, to be pushed too far to the left from the core of general medicine? Above all we are Doctors of Medicine, specializing in a field just as much a part of medicine as that of the internist, the surgeon, or the obstetrician. Where are the psychiatrists at a general medical meeting? Either not there at all, or congregated in a group to themselves in a more or less inconspicuous area of the lecture hall. There are few medical papers in any field of medicine, presented to an audience of medical men, which could not provoke some discussion from the psychiatrist. But how many times do we rise to the occasion? Rarely. How many psychiatrists take an active interest in their local medical society, or their state medical society.—Turner, C. C.: A Psychiatrist Looks at Psychiatry, *Memphis M. J.* 32:9 (Jan.) 1957.

Röntgen Examination in Acute Conditions of the Abdomen

A. B. CROOM, M.D.

DURHAM

Röntgen examination has long been recognized as a valuable aid in diagnosing acute conditions of the abdomen. A review of the practical application of this procedure is presented not in order to suggest new material, but to outline briefly its values and limitations. The value of the anteroposterior view is commonly accepted, but upright studies, lateral decubitus positions, and spot films of various segments for detailed analysis offer additional aid in problem cases. Serial films are also of value in doubtful cases.

Intestinal Obstruction

This condition is characterized by distended loops of bowel proximal to the point of obstruction, associated with collapse of the distal bowel. The segments of the upper small bowel are recognized by the transverse bands of the valvulae conniventes, while the distal small bowel is almost patternless and difficult to distinguish from the distended sigmoid. It is essential to distinguish between mechanical obstruction and paralytic ileus, which is characterized by dilatation of the entire bowel and loss of muscle tone. Localization of the point of obstruction by the injection of a 35 per cent solution of Diodrast or Urokon into a stomach or intestinal tube has recently been advocated by Canada⁽¹⁾. The opaque material is followed fluoroscopically or by serial films to the point of obstruction or until it is seen to pass through the bowel, thus excluding complete obstruction.

The mechanics of the small bowel aid in the diagnosis of obstruction, and the upright film of fluoroscopy to show changing fluid levels may be the deciding factor in some cases (fig. 1, A. and B.).

The differentiation of simple obstruction from strangulation of the bowel is imperative, as in the former expectant treatment by intubation may be permissible, while in the latter the earlier the surgery, the better the prognosis. The x-ray findings, where strangulation is present, may appear inno-

cuous and in themselves be misleading without careful clinical correlation. Rigler⁽²⁾ has described the "coffee-bean" sign as an early finding, but, as the lesion becomes complete, the air in the bowel is absorbed and we see only a few bubbles of gas in the bowel with a soft tissue shadow, due to the collection of fluids, which has the appearance of a mass.

When obstruction of the large bowel is present or suspected, the use of barium enema without attempts to force past the site of obstruction is essentially without hazard and may give valuable aid.

It is worth while to note that if multiple loops of bowel are involved, the findings become atypical and develop more slowly.

Volvulus

This form of obstruction occurs in the small bowel, in the region of the cecum, and in the sigmoid. The signs usually develop rapidly, and in the first two instances may give only the findings of acute, complete obstruction. In the region of the sigmoid the double loop of the greatly distended large gut may fill the entire abdomen. Barium enema showing the twisted mucosa is pathognomonic of this condition.

Vascular Accidents

The findings may be grossly misleading in vascular accidents, appearing benign until peritonitis develops as a secondary complication. The positive findings closely simulate mechanical obstruction, but Frimman-Dahl⁽³⁾ reports no early characteristic of his cases. Close clinical correlation is again of extreme importance.

Peritonitis

The picture presented by peritonitis is secondary ileus and the obliteration of flank lines caused by edema of the peritoneum and properitoneal fat. Thickening of the bowel wall by edema and fixation of the loops by adhesive exudate develops as the disease progresses (fig. 2).

Ruptured Hollow Viscus

The classic demonstration of free air in the peritoneal cavity may be best accom-

From the Department of Radiology, Duke Hospital, Durham, North Carolina.

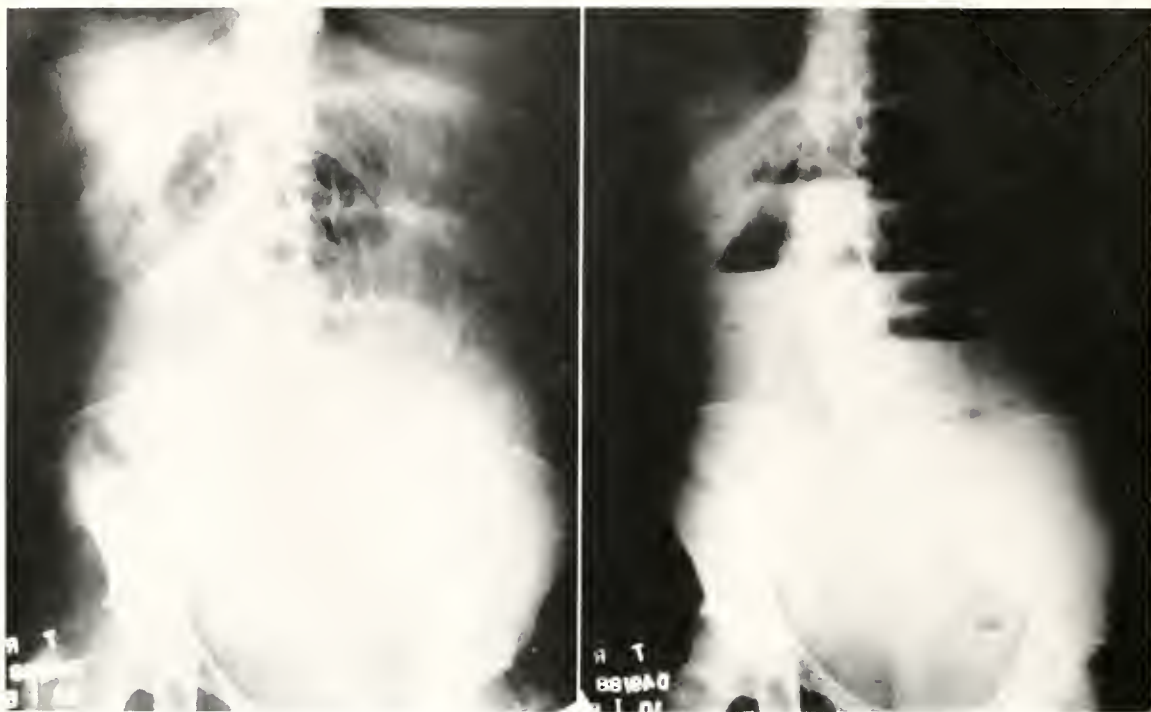


Fig. 1. Small bowel obstruction.

A. (Left) Roetgenogram showing distended small bowel with transverse bands in anteroposterior view.

B. Upright film showing air fluid levels in the jejunum.



Fig. 2. Peritonitis in an infant. Note bowel distending without any set pattern, and thickened bowel wall caused by edema and exudate.

Fig. 3. Free air under the diaphragm. Patient had terminal ileitis with rupture and abscess formation.



Fig. 4. Intra-abdominal abscess secondary to terminal ileitis.

lished by lateral decubitus and chest films. Very small amounts of air may be demonstrated, Young⁽⁴⁾ reporting the demonstration of free air under the diaphragm within 20 minutes of the introduction of 2 cc. of air into the peritoneal cavity. A careful history is important, as free air may be present in the abdomen for as long as four weeks following abdominal surgery. Air may also be introduced intentionally for therapy or diagnosis (fig. 3).

Free Fluid

Large amounts of free fluid obliterate the soft tissue detail, lending an over-all grayness to the film. Smaller amounts are best demonstrated on the upright film as a "new moon" pelvic shadow or may obliterate the soft tissue detail in the pelvis. We have seen a case in which 3,000 cc. of blood was removed from the abdomen following rupture of an ectopic pregnancy, without obliteration of the psoas shadows. It would appear that peritoneal edema is more likely to produce roentgenographic changes than is the presence of free fluid alone.

Infectious Processes

Appendicitis, cholecystitis, and pelvic inflammatory disease may be manifested by local ileus adjacent to the infection, described as the sentinel loop. The presence of gas in the small bowel of an adult is abnormal, but the interpretation of this finding may be difficult unless one can demonstrate the fixed nature of the loop as a constant finding. When abscesses form, multiple views⁽⁵⁾ help reveal the fixed nature of the pathologic process (fig. 4).

Opaque Calculi

While the majority of urinary calculi are formed from inorganic salts and are radio-opaque, the opposite is true of stones in the gallbladder. Up to 97 per cent of stones in the urinary tract may be visible on the plain film if they are large enough to cast a shadow, while only 5 per cent of the gallstones are visible without the use of contrast materials. Occasionally gallstones may erode into the bowel, causing obstruction (gallstone ileus). They commonly obstruct the small bowel at the ileocecal valve.

Acute Pancreatitis

Localized ileus about the pancreas associated with stasis is frequently described as a helpful sign. Baylin and Glenn⁽⁶⁾ have reported cases from this hospital in which irritability and spasm contributed to the diagnosis. It is possible that these two findings represent different phases of the disease. Either sign may best be demonstrated by the use of small amounts of barium taken by mouth. Calcifications in the region of the pancreas may give aid on the plain film.

Traumatic Rupture of Intra-Abdominal Viscus

Traumatic rupture of the liver and spleen produces loss of outline, restriction of diaphragmatic motion, and obliteration of the flank lines, increasing to demonstrable fluid in the abdomen. If hematoma develops, displacement of adjacent organs may be demonstrated.

Ovarian and Uterine Tumors

Calcifications in the ovaries or in fibroids

may frequently be seen. In dermoids, the presence of hair or fat is demonstrated as an area of decreased density. As these tumors are notorious for their long pedicles and are prone to undergo torsion, the above signs may lend valuable clues to the diagnosis.

Pulmonary Diseases

It is well recognized that pulmonary disease may simulate acute abdominal emergencies, and a chest film may easily differentiate the diagnosis in some cases.

Conclusion

Some of the common abdominal emergencies have been presented. It is emphasized

that close clinical correlation is imperative and that proper interpretation requires careful study by experienced observers.

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Tetany In Women Following Spinal Analgesia

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SMITHFIELD

and

EDWARD J. ORDORICA, M.D.

MINEOLA, NEW YORK

The phenomenon of tetany in young women following spinal analgesia for rectal surgery has not been previously reported to our knowledge. In this report a number of cases are presented which show marked similarity of behavior under certain circumstances to be described. Peculiar to them all is the age and sex incidence, marked carpopedal spasm and paresthesias developing one to two hours postoperatively, and the dramatic response to the intravenous administration of calcium gluconate.

The diagnosis of tetany is obvious in the presence of Erb's, Trousseau's, or Chvostek's signs and carpopedal spasm, laryngospasm, or convulsions. Neuromuscular irritability results from a decreased concentration of ionized calcium in the blood. Any disease or abnormal glandular function which upsets this calcium balance in the blood will manifest itself in tetany. We can usually eliminate various possible causes of tetany by ruling out recent thyroidectomy, cases of hyperventilation, alkalosis, steatorrhea, acute pancreatitis, nephrosis, and a loss of chlorides from vomiting or gastric lavage.

Our knowledge of parathyroid activity does not tell us how its hypofunction produces neuromuscular irritability. This phenomenon may be related to changes in the cell permeability resulting from shifts in the titer of circulating calcium. Hayes⁽¹⁾ found, in his studies, that parathyroid hormone could alter the urinary excretion rate of phosphorus. This alteration raises total serum calcium and abolishes tetany.

In acute pancreatitis, the rise in serum fatty acids controls calcium levels of the blood. Calcium chloride given intravenously is of no therapeutic value, as it is excreted readily during the acute disease. The rise in serum fatty acids, associated with an elevation in the levels of serum lipase, increases the free hydroxyl radicals of organic acids which bind ionic calcium. Ionic calcium, when given as calcium chloride parenterally, is excreted via the urine without altering the ionized fraction in the serum. There is thus no influence on the exaggerated neuromuscular irritability. The tetany syndrome improves as the serum fatty acids return to normal levels.

Tetany is not uncommon between the ages of 3 months and 2 years, but is rare

Table 1
Cases Requiring Calcium Gluconate Intravenously Following Surgery
Under Spinal Anesthesia

Case	Age	Operating Time	Operation	Preoperative Medication	Calcium Needed
1	36	1 hour 15 minutes	Hemorrhoidectomy	Nembutal 0.1 Gm. Morphine 10 mg. Scopolamine 0.45 mg.	1 Gm.
2	27	1 hour 15 minutes	Hemorrhoidectomy	Same as above	1 Gm.
3	25	1 hour 10 minutes	Hemorrhoidectomy	Same as above	1 Gm.
4	27	35 minutes	Hemorrhoidectomy	Morphine 10 mg. Atropine 0.45 mg.	1 Gm.
5	32	25 minutes	Hemorrhoidectomy	Morphine 10 mg. Scopolamine 0.45 mg.	1 Gm.
6	35	50 minutes	Hemorrhoidectomy and anal ulcer	Nembutal 0.1 Gm. Morphine 10 mg. Scopolamine 0.45 mg.	2 Gm.
7	27	40 minutes	Pilonidal Sinus	Demerol 100 mg. Atropine 0.45 mg.	2 Gm.**

**One and one half hours after the 2 Gm. of calcium gluconate, additional 1 Gm. needed.

Spinal analgesia used in all cases: 10 mg. of 1% Pontocaine with 0.5 cc. of 10% dextrose.

thereafter. Infantile rickets with its deficiency in the intake or absorption of calcium, chronic diarrhea, phosphate retention due to renal insufficiency, or excessive intake of vitamin D can easily upset the internal environment of body cells in children. In later life, usually under the age of 19 years, we may find tetany; in these cases the parathyroid gland is usually at fault.

But what of the symptoms we frequently notice in women in their twenties and thirties—the consistent sensations of tingling or numbness, fine tremors, and cramps, occurring mainly but not exclusively in the fingers, and associated with increased tension?

Latent tetany becomes evident only after special electric or mechanical stimuli and/or following acute infections or trauma. Is this a real metabolic disturbance? What is disturbed? These people are normocalcemic, with no evidence of parathyroid dysfunction. They are apparently in good health until the onset of infection or some form of trauma. The trauma may be an actual injury or surgical intervention of some sort. Can this sudden onset of carpopedal spasm be on a hormonal basis, or is it due to trauma? Is an excess of epinephrine released at the time of insult? Why does it affect women in the majority of cases?

Review of Cases

Over the past three years we have seen 7 cases of carpopedal spasm following spinal anesthesia in young women. Preoperatively the patients were considered in

good health and presented no unusual findings. Their past histories were essentially negative with regard to convulsions, paresthesias, tremors, and muscle cramps. They were admitted for either anal surgery or pilonidal sinus excision. None had had previous operations. Specific data regarding these cases are presented in table 1 to show their similarity.

Lumbar puncture was performed at the third and fourth interspace with a number 22 gauge needle. The solution was injected slowly, with the patient in the sitting position. Sixty seconds were allowed to elapse before the patient assumed the prone jack-knife position in which all operations were performed.

Only one of the patients (case 7) needed more than 2 Gm. of calcium gluconate. She was also the only patient who gave any history of a nutritional problem. She had been dieting and had not taken a glass of milk in more than 18 months.

Unfortunately, we do not have a record of the menstrual cycle of these women. This may have given a clue to their tetany, if a hormonal production is at fault.

A review of these patients would indicate that neither the preoperative medication nor the operating time has much influence on the development of tetany. The same type of spinal analgesia was used in all cases. The 7 operations were done by four different surgeons. The average age of the patients was 29.8 years, the oldest patient being 36 and the youngest 25 years of age.

There were at least 5 other cases of tetany following spinal analgesia for which the records could not be obtained. The patients were all women who had had spinal analgesia for rectal surgery. All were relieved by intravenous calcium gluconate.

Comment

This work is presented as a preliminary report on tetany following spinal analgesia and perhaps will promulgate further investigation of this phenomenon, as the exact cause is unknown. We can only surmise what the cause of such a reaction might be.

Sandock⁽²⁾ and several investigators felt that estrone is a potent factor in the development of tetany in premenopausal women. They explain the increased tendency to tetanic attacks in the premenstrual period and in the latter half of pregnancy as due to increased estrone content in the blood at that time. How the hormone affects the blood calcium level in relationship to the menstrual cycle is not known. It was found that dihydrotachysterol (A. T. 10) did cure or cause subsidence of the periodic tetany in cases where the drug was tolerated. Other patients were subjected to radiation castration and their tetanic attacks sub-

sided. The dihydrotachysterol may have increased ionized calcium in the blood, and the x-ray castration reduced the estrone output.

Harvey and Lilienthal⁽³⁾, in 1942, reported that intra-arterial injections of epinephrine into those with hypocalcemia provoked local tetany. Epinephrine released upon physical activity or excitement will provoke an attack of tetany or carpopedal spasm in certain individuals. Are we dealing with a traumatic release of epinephrine from our spinal tap and surgery, or are we producing hormonal hyperfunction in these women? Perhaps the cases are those of latent tetany, having poor intake of calcium in their diet over a long period of time, or again we may be dealing with hypocalcemia from undiagnosed hypoparathyroidism. A review of our cases does not give us a definite clue to the real underlying cause.

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Address on the Unveiling of Portrait of Dr. Wingate M. Johnson

*Bowman Gray School of Medicine of
Wake Forest College
February 5, 1957*

WATSON S. RANKIN, M. D.

CHARLOTTE

Dr. William E. Hocking makes some interesting introductory remarks about pictures in his book on *The Self, Its Body and Freedom*. He writes that it has been said that man is the animal that laughs but that the distinction is not wholly unassailable. "But surely," says Hocking, "man is the animal that makes pictures." On the walls of his cave the cave-man drew his crude pictures to retain, to fix, to hold ideas that gave him pleasure, and centuries prior to

any alphabet there was the pictograph. So the little child today makes pictures before it learns the alphabet. Hocking defines a picture as an idea halted in its flight. To use his own words: "The essence of the picture is an enjoyment of the meaning of things apart from their changing aspects: it is the capture of a fragment of eternity out of the flux of events."

But a portrait, such as that which we are to see unveiled here today, while inclusive of all the elements of a picture, is something more. It is the response of collective and discriminating respect and esteem for unusual worth and achievement. The tan-

This address is being published at the request of the dean of the Bowman Gray School of Medicine and without the knowledge or consent of the editor of the NORTH CAROLINA MEDICAL JOURNAL.

gible evidence and measure of respect is reflected in the positions of confidence and influence which one has held.

In his chosen field of service, medicine, Dr. Johnson is a Diplomate of the American Board of Internal Medicine and a Fellow of the American College of Physicians — two professional groups that require applicants for their approval to meet the highest and most exacting standards of professional knowledge and skill. He is a member of Alpha Omega Alpha, a medical fraternity with its interest centered especially in professional leadership. He has been president of the Forsyth County Medical Society, of the North Carolina State Medical Society, and has served on the Board of Trustees of the American Medical Association. Eliminating further details, he is one of the soundest and most trusted advisers in matters of basic policies of his local, state and national professional affiliations.

In literature and education, he is the author of three books: *The True Physician*, *The Modern Doctor of the Old School*, and *The Years After Fifty*. For 16 years he has been editor of the NORTH CAROLINA MEDICAL JOURNAL—an editor of broad vision, rare insight, and fascinating style. His editorial interest and ability comes naturally—a family trait. His father, Livingston Johnson, and his uncle, Archibald Johnson, well known and highly respected editors of the last generation, were skilled in the high art of fitting wings to ideas. His first cousin, Gerald Johnson, is a writer, as we all know, of national status in the field of letters. Dr. Johnson is a member of the scholarship fraternity of Phi Beta Kappa. He holds two honorary degrees, an Sc.D. from Wake Forest College, and an LL.D. from Jefferson Medical College.

Perhaps, in the larger perimeter of life, Wingate Johnson has made his greatest and more lasting contributions to society in general through the far-reaching channels of education. For twenty years he served on the Board of Trustees of Wake Forest College, for a part of that time as president of the board. Perhaps, if all the pieces of the jigsaw were assembled, we would see that he played a very essential part in moving his Alma Mater from a restricted to a greatly expanded field of service.

In the special field of medical education,

Dr. Johnson has served as professor of clinical internal medicine in the Bowman Gray School of Medicine of Wake Forest College since 1941, when the last two years of a complete four-year course of study were begun in Winston-Salem. He both organized the Private Diagnostic Clinic of the School of Medicine and has been its Chief since its beginning.

What this man has meant to the thousands of sick, bed-ridden and ambulatory that have found here comfort and cure, what he has meant and means to hundreds of graduates of medicine of this School, what he means to the thousands of their patients—are the intangibles that tabulations cannot convey. These are the imponderables that can be only partially recorded in a vocabulary sprung from matter and largely bound to the material.

And so we pass from the more obvious external and tangible expressions of life to the inner intangible elements of being. Albert Schweitzer may perhaps be helpful in lifting us across the chasm that separates these two major aspects of life, the tangible from the intangible.

Dr. Schweitzer, at 28 years of age, in 1903, was principal of the Theological College of Saint Thomas, a department of Strasburg University. He was giving advanced ministerial students their final courses in the Old and New Testaments. In 1905, when 30 years of age, he reached a crucial decision: he decided to give up a successful university career and to study medicine. What was his reasoning? He writes in *My Life and Thoughts*: "I wanted to be a doctor that I might be able to work without having to talk. For years I had been giving myself out in words, and it was with joy that I had followed the calling of theological teacher and preacher. But this new form of activity I could not represent to myself as talking about the religion of love, but only as an actual putting of it into practice." What was back of, antecedent to this sort of reasoning? When Schweitzer wrote his thesis for his degree of Doctor of Philosophy, he chose for his subject *The Religious Philosophy of Kant*. He was a profound student of Kant. George Seaver, in his biography of Schweitzer, writes: "there is no philosopher ancient or modern with whose central thought the

mind of Schweitzer can be more akin, or feel in closer sympathy."

Kant drew the line between the intellect, "a manifold of matter," that is concerned with things, with the phenomenal world, and the moral sense and intuition that is concerned with the noumenal realm, with personality. Henri Bergson drew the distinction between the two faculties even more sharply.

There is a knowledge of things in which the relation is that of subject, the knower, and object, the known. There is a knowledge of some one through reading a biography, complete, accurate descriptive knowledge, but the relation between the knower and the known is still very largely that of subject and object. Then there is a knowledge that comes through an intimate and subjective, not a casual and objective, acquaintance with a person, personal knowledge, more feeling than perception; this is the knowledge that comes through long association, mutual interest, shared experiences, companionships, the idealized knowledge of husband of wife, of wife of husband, of parents of children, of children of parents, of genuine friendships. These are not relations of subject and object but of subject and subject: a duality becomes a oneness.

Schweitzer, at Strasburg, became dissatisfied; he craved for something more than reading about Jesus and writing about Him and lecturing about Him. He remembered Immanuel Kant, particularly his *Critique of Practical Reason*, his ethical teaching, his categorical imperative, the OUGHT, spelled with capitals; that goodness resides in the will, that only a will can be good;

that *obedience* is the organ of *spiritual understanding*. So Schweitzer gave up the library and lecture room for the field of action, for the sharing of very humanizing experiences in which the relation of two persons is not that of subject and object but that of subject and subject and, through the deeper elements of such experiences, he sought to learn the secret of that saying: "If any man will *do* the *will* of God, he shall *know* of the doctrine whether it be of God or whether I speak of myself." So Schweitzer refers to his work at Lambarene as an ineffable experience "through which one comes to *know* who He is." He found Him not on the level of intellectual concepts, but on the loftier plane of moral experience and convictions. Intuition led where intellect unaided could not go.

I have a good friend who is dean of a well known school of medicine. On more than one occasion I have spoken to him about some boy who wanted to study medicine, and not once but a number of times, in connection with the aspirant's qualifications, he has asked me "does he love people." He was asking me if the boy had something more than an intellectual curiosity, something else than a mere selfward desire to make a living. There is means or knowledge, and there is power or motivation. The engine will not run without power.

Pardon me for the digression, or for the long detour by Lambarene, but there on the banks of the Ogoose, there is an invisible pigment, in rare purity, which was needed to give depth of meaning to this portrait of my dear friend, Wingate Memory Johnson—once my student, and now my teacher.

There is no problem of professional relationships which cannot be solved by the simple application of the Golden Rule.—DeTar, J. S.: The Place of the Generalist in Hospital Staff Organization, Memphis M. J. 32:11 (Jan.) 1957.

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"The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration. Whoever chooses this profession assumes the obligation to conduct himself in accord with its ideals"—Principles of Medical Ethics of the American Medical Association, Chapter 1, Section 1.

MARCH, 1957

ON TO ASHEVILLE IN MAY

President Donald B. Koonce's monthly messages have all been so timely and so worth while that it is a superfluous gesture to call attention to the message in this issue. It is pertinent, however, to remind our readers that it has been 21 years since the State Society last met in Asheville. Since then many improvements have been made in the hotel and auditorium facilities of that city. The highways leading into it have all been improved, so that it can be reached much more quickly and comfortably than in 1936.

President Koonce has worked hard at his job during the past year, and has made a splendid record. The members of the Society can show their appreciation of his

efforts by a full attendance at the annual meeting, May 6-8. The program that has been arranged will reward their attendance.

* * *

THE SCIENTIFIC MEMBERSHIP

A letter from President Donald Koonce to the presidents and secretaries of all county medical societies, dated July 18, discussed the integration of physicians under the scientific membership authorized by the House of Delegates in 1955 and ratified in 1956. In the letter he quoted the Constitution and By-Laws now in effect.

Since many of our members were not present when the amended sections were adopted, and since the changes are of general interest, it seems pertinent to publish them in the JOURNAL:

CONSTITUTION

Article IV.—Membership of the Society

The membership of this Society shall consist of the following:

Section 1. The members of this Society shall be classified as Active Members, Student Members, Affiliate Members, Honorary Members, Intern-Resident Training Members, Scientific Members and Life Members.

Section 2. Active members of this Society shall be the members other than the Scientific Members of the component societies, and those physicians who are admitted by the Executive Council as hereinafter provided.

Section 8. Scientific Members. Scientific Members are those physicians other than white who are admitted with the privilege of participating in the scientific and business sessions of the Society and of voting and holding office. They shall pay annual dues and assessments fixed by the Executive Council, not to exceed the annual dues for Active Members.

BY-LAWS

Chapter I—Membership

Section 1. All members of the component county medical societies permitted and provided for by the Constitution and By-Laws of this Society and all members provided for by the Constitution who have been made members by the Council, Honorary Members, Affiliate Members or Scientific Members who have been made such Members by the Council, and who have paid their annual dues for the current year, shall be privileged to attend all business and scientific sessions of the annual meeting, and shall be eligible to vote and hold office in the Society.

Chapter XV—County Societies

Section 5. Each county society shall be the judge of the qualifications of its own members, but, as such societies are the portals

to this Society and to the American Medical Association, only reputable and legally registered white physicians who are practicing or who will agree to practice, non-sectarian medicine, shall be admitted as active members; provided that other reputable and legally registered physicians practicing non-sectarian medicine may be admitted as Scientific Members with the privilege of attending and participating in all scientific and business sessions of the Society, and of voting and holding office.

The Executive Council as authorized under Chapter XII, Section 1, of the By-Laws established the dues for Scientific Membership at the rate of \$20.00 a year—\$5.00 of such dues to be allocated to the general fund of the State Society and the remaining \$15.00 to the public relations fund.

* * *

THE FEDERAL BUDGET

Secretary of the Treasurer George Humphrey voiced the sentiment of millions of United States tax payers when he openly criticized the enormous budget presented to Congress by President Eisenhower. Millions of those who voted for Eisenhower must wonder why he is advocating a policy that must inevitably lead to inflation, which can lead eventually to a depression. Former President Hoover, commenting on Secretary Humphrey's warning that if the government does not reduce the present high tax rate it will see a depression that "will make your hair curl," said: "Mine has already been curled once—and I think I can detect the signs."

President Eisenhower apparently sought to justify the largest peace-time budget in history by saying that "as long as the American people demand and, in my opinion, deserve the kind of services that this budget provides, we have to spend this kind of money." A plain, blunt citizen may be pardoned for wondering out loud just how our President, or any one else, knows how many American people are willing to mortgage their future and the future of their children and grandchildren in order to have the kind of services provided by the budget.

Marjorie Shearon recalls that "As recently as 1938, President Roosevelt was able to operate the entire Government on less than \$7 billion—less than we now have to spend to pay the interest on the national debt."

In discussing the budget, the President makes two contradictory statements: (1) that Government "must exercise a strict discipline over its expenditures and avoid taking in taxes too much of the incomes of individuals and businesses"; (2) "It would be neither fair nor appropriate to allow excise and corporate tax reductions to be made at a time when general tax reductions cannot be undertaken." Again John Q. Citizen may be pardoned for wondering when taxes can ever be reduced, if not now?

Senator Harry F. Byrd, chairman of the Senate Finance Committee, in proposing to cut the budget by 5 billion dollars, says:

"The President's Budget is inflationary at a time when the country is facing a definite threat of inflation . . .

"The principal reason why the Eisenhower Administration was able to stabilize the dollar in its first three years in office was because the President, with the help of Congress, cut \$9 billion out of the budget Truman had proposed.

"We have certainly gone into a period of inflation now and the Eisenhower Budget will increase that trend . . ."

The one hope of getting this monstrous budget reduced is for enough citizens to write their Representatives and Senators letters of protest against the confiscatory taxes proposed for 1957 and 1958. The country has already gone so far down the road to Socialism that it is hard to call a halt. The only ones who can save us from such a fate are our chosen national legislators. They are sensitive to public opinion. May they be made to know that enough is enough—and too much is too much.

* * *

MEDICAL EDUCATION WEEK

The impressive story of the accomplishments of U. S. medical schools will be told to the nation during the second annual observance of Medical Education Week April 21-27.

The purpose of the observance is to focus the attention of the American people on the national importance of medical education. A well organized program of public information should bring about greater friendship and support for the medical schools by creating a better understanding

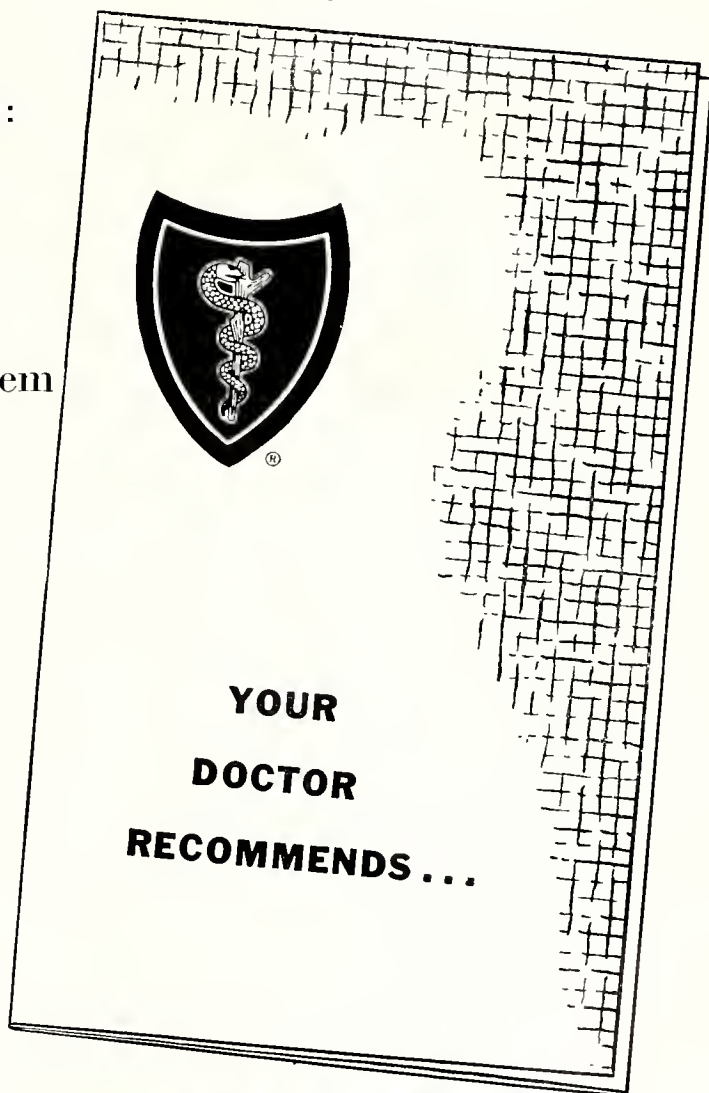
Easy way for your patients to get full details about the Doctors Program

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North Carolina's BLUE SHIELD[®]

Hospital Saving Association

CHAPEL HILL, NORTH CAROLINA

Erythromycin in Treating Pneumonia

A 27-year-old man, a chronic alcoholic, was admitted with a history of an alcoholic spree followed by a cough, greenish sputum and chills and fever.

Physical examination showed a temperature of 104 F. and indicated pneumonia in the right lower lobe. This was confirmed by X-ray. The sputum revealed gram-positive diplococci and blood culture subsequently grew Type VII pneumococci.

The patient was treated with erythromycin, 300 mg. every six hours per os. His temperature dropped to normal by 48 hours and X-ray of the chest revealed considerable clearing by the fourth hospital day. After 10 days hospitalization, the patient was fit for discharge.¹

In the First Antibiotics Symposium, we reported the successful treatment with erythromycin of *H. influenzae* pneumonia and bacteremia. A second patient with *H. influenzae* pneumonia and bacteremia had a clinical course almost identical to the one previously reported, with cure obtained by treatment with 500 mg. of erythromycin per os every four hours for 14 days.

"Highly Effective in Pneumonia"

In one investigation, 75 adult patients with bacterial pneumonia were treated with erythromycin. In his summary, the clinician reported: "It is concluded that erythromycin is highly effective in the treatment of pneumonia due to gram-positive bacteria."²

This, of course, is only one of many reports showing the effectiveness of ERYTHROCIN against coccic infections. You'll get the same good results (nearly 100% in common, bacterial respiratory infections) when you prescribe ERYTHROCIN. **Abbott**



Erythrocin[®]

(Erythromycin, Abbott)

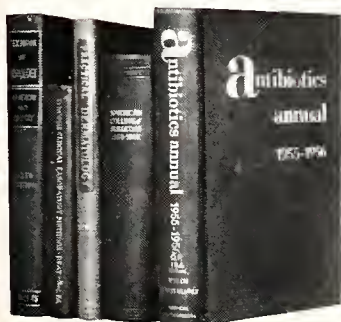
STEARATE

"No Serious Side Effects Occurred"

After a study of 171 patients treated with erythromycin, the investigator wrote: "No serious side effects occurred with prolonged therapy or with doses up to 8 Gm. per day in the severe infections."¹

Actually, ERYTHROCIN stands on a remarkable record of safety. After four years, there's not a single report of a severe or fatal reaction attributable to erythromycin. In addition, you'll find allergic manifestations rarely occur. *Filmtab* ERYTHROCIN Stearate (100 and 250 mg.), in bottles of 25 and 100. **Abbott**

® Filmtab—Film-Sealed tablets, Abbott; pat. applied for.



1. Romansky, M.J., et al., *Antibiotics Annual 1955-1956*, p. 48.
2. Waddington, W. S., Maple, F. C., and Kirby, W. M. M., *A.M.A. Archives of Internal Medicine*, 1954, p. 556.

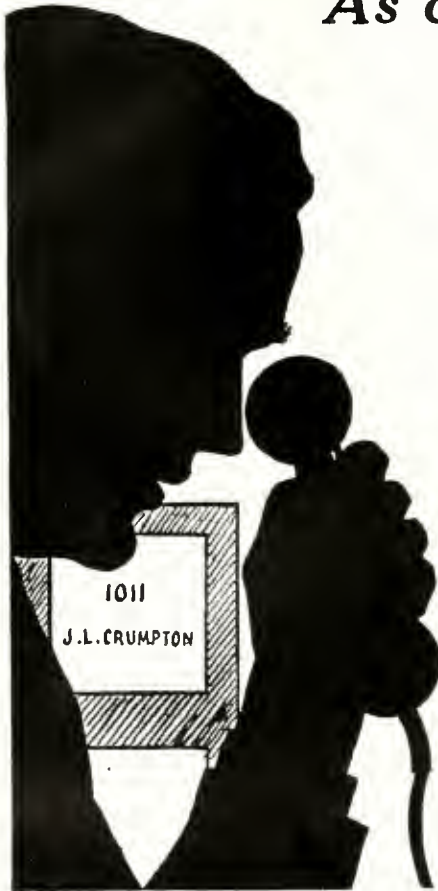
TO MEMBERS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

As close as your phone . . .

TELEPHONE COLLECT

5-5341 - DURHAM

If you have any problems in connection with disability insurance we invite you to call this office—collect. We'll do our best to help you—and there's no obligation on your part.



Below Is The Accident and Health Plan Established By The State Society For Its Members In 1940. Over \$700,000.00 In Disability Benefits Have Been Paid To Members of The Society Since The Plan Was Established.

PLANS AVAILABLE

<i>Accidental Death</i>	<i>Dismemberment Benefits, Up to</i>	<i>Accidental and Sickness Benefits</i>	<i>Annual Premium</i>	<i>Semi-Annual Premium</i>
\$5,000.00	\$10,000.00	\$ 50.00 weekly	\$ 90.00	\$45.00
5,000.00	15,000.00	75.00 weekly	131.00	66.00
5,000.00	20,000.00	100.00 weekly	172.00	86.50
		(\$433.00 per month)		

Members under age 60 and in good health may apply for \$10.00 per day extra for hospitalization at premium of only \$20.00 annually, or \$10.00 semi-annually.

FOR APPLICATION, OR FURTHER INFORMATION, WRITE OR CALL

J. L. CRUMPTON, State Mgr.

Professional Group Disability Division

Box 147, Durham, N. C.

*Representing—*COMMERCIAL INSURANCE COMPANY OF NEWARK, N. J.

of their aims, problems, achievements, and public services.

President Eisenhower, in his personal endorsement of this observance, said: "While the benefits of health and medical education are daily with us, it is fitting to devote a special week to the consideration of the wider training of physicians. Each American has a personal stake in our country's medical schools. The schools which train the physicians required by our growing population are a vital resource for the health of our people and the strength of the Nation."

Specific aims of Medical Education Week, if pursued effectively, will demand the participation of a large portion of our members. These are the goals:

1. To portray the key role that medical education plays in the promotion and maintenance of the nation's health and security, and to make the public aware that the nation's 82 medical schools are the foundation of our entire health and medical structure.

2. To explain how the medical schools are striving to meet the demand for larger numbers of physicians and, at the same time, to maintain the high standards of American medical education.

3. To call attention to the steady progress in the medical sciences, showing what this means in terms of longer life, better health and greater freedom from disease and disability.

4. To point out the wide range of activities—teaching, research, service, and leadership—carried on by the modern medical school in addition to its job of training new doctors.

5. To make clear the extent and nature of the new challenges to the profession—some growing out of our constantly expanding fund of medical knowledge and some resulting from the mounting complexity of our civilization.

6. To point out some of the steps being taken to extend the horizons of the medical sciences and to use fully the nation's health resources.

While medical societies and medical schools throughout the country build community programs around these objectives, the national sponsors—the A.M.A. and the Woman's Auxiliary, the Association of

American Medical Colleges, the Student A.M.A., the American Medical Education Foundation, and the National Fund for Medical Education—are enlisting the help of newspaper syndicates, radio and television networks, popular and professional publications, civic groups, industry, and commerce in a broad program of national publicity and promotion.

* * *

NEW YORK STATE SOCIETY SESQUICENTENNIAL

The Medical Society of the State of New York held its first meeting in February, 1807. In February 18 to 21 of this year it celebrated its one hundred fiftieth birthday with a well balanced program. The entire issue of the *New York State Journal of Medicine* for February 1 is devoted to the convention program and a history of the Society. It is the largest issue of that Journal ever published—more than 300 pages—and is all dressed up for the occasion with a specially designed cover.

Although the North Carolina State Medical Society held its first meeting in December, 1799—more than seven years before New York's Society—it almost "died aborning." After 1804 no further meetings were held until it was rejuvenated in April, 1849, and christened by its full name, "The Medical Society of the State of North Carolina." Four meetings were missed during the Civil War, and one during the second World War—1945, because of travel restrictions, so that the one hundredth meeting was held in 1954. For this reason, presumably, the 1954 meeting was celebrated as the centennial of our own Society.

The New York Society missed no meetings during the Civil War, and merely postponed its 1945 meeting from April until October—and so has a record of 150 years of unbroken continuity.

Even though New York is some distance from North Carolina, the two states are really neighbors in one respect. In the alphabetical list of states they are next door to each other. THE NORTH CAROLINA MEDICAL JOURNAL extends to our alphabetical neighbor heartiest congratulations and best wishes for the next century and a half.

President's Message

Published in this month's JOURNAL is a tentative program of the One Hundred Third Annual Session of the Medical Society of the State of North Carolina. As you will see, this program is a rather ambitious one, but differs in no way from those of recent years held at Pinehurst except in location. The change in location is, of course, an important factor because of the increase in distance for a large number of our medical profession. Because of this increase in distance, it is expected that there will be a marked decrease in the number of so-called transient or daily attenders at these meetings. There is a considerable increase in distance from the central area of Raleigh, Durham, and Greensboro, but very little from Charlotte and Winston-Salem. During recent years there has been a steady increase in the registration of members attending the meeting for its full duration. It is hoped that this registration will continue in its full force.

As the tentative program shows, adequate preparations have been made for recreation as well as for medical education. Arrangements for the golf tournaments and other activities as well as arrangements

for entertainment on Banquet Night have been completed and, I am sure, will be pleasing to all. Arrangements for the many scientific programs are practically complete and, I believe, will be beyond reproach.

Of great importance are the many, many problems which will come before the business sessions of the meetings. We have many problems of vital importance to the entire medical profession of North Carolina which will require definitive action during these business meetings. It is a necessity that this meeting have good attendance because of these many problems. It is of equal importance that this meeting have good attendance for the preservation of the type and caliber of meetings that members of the medical profession of North Carolina have become accustomed to. The advance registrations are very encouraging. Let us make this meeting one of the most important and enjoyable of all. As your President, I strongly urge every member of the Medical Society of the State of North Carolina to attend for as long as possible, even at the expense of small sacrifices, this One Hundred Third Annual Session.

Donald B. Koonce, M.D.

New Film Series Marks Start of Educational Program

The film "The Medical Witness" had its premiere showing in Seattle on November 27 before an audience of 650 physicians and attorneys.

This film is the first in a series of six intended to acquaint physicians with their essentiality in litigation and to dispel their fears of testifying in court. The film is also intended to aid attorneys in their working relationships with physicians and to impress upon them the necessity for adequate pre-trial preparation and the use of proper demonstrative evidence.

"The Medical Witness," a 30-minute black and white 16 mm. film, depicts right and wrong methods of presenting medical testimony by re-enacting the trial of a personal injury case. The series is being produced by The Wm. S. Merrell Company, Cincinnati, Ohio, ethical pharmaceutical manufacturer, as a service to the medical and legal professions.

Medical societies may obtain on loan "The Medical Witness" for showing at meetings. The film will be available until October 20 at the headquarters of the Medical Society of the State of North Carolina, P.O. Box 790, Raleigh.

Committees and Organizations

COMMITTEE ON OCCUPATIONAL HEALTH

OPENING REMARKS BY GOVERNOR LUTHER H. HODGES AT FIRST GOVERNOR'S CONFERENCE ON OCCUPATIONAL HEALTH

Raleigh, January 24, 1957

I am happy to have the opportunity to sponsor this first Governor's Conference on Occupational Health, and wish to express to those of you who served on the Conference Planning Committee my deep appreciation for your very fine work. I am sure that we shall all benefit from your vision and untiring efforts in planning this program. A glance at the program showing the distinguished speakers indicates that you have done your work well.

This bringing together of leaders in industry and business, labor, the medical profession, and of representatives from official state agencies concerned with the problems of employee health and safety is a forward step for North Carolina. I trust that we shall have other such meetings in the future.

The Need for Industrial Expansion

I do not need to remind this group of the urgency of our need in North Carolina for greatly expanding our industrial development. All of us have been deeply concerned about the indices of our low economic standing among the states, particularly our low per capita income. We realize that the development of more industries, diversified and well distributed geographically, is the first requisite for raising our income and promoting our economic health and growth.

Since taking office as Governor in November, 1954, I have constantly sought to promote indigenous industries, as well as to attract outside industries to the state. It has been a matter of primary concern and emphasis to me and to your state government, and our efforts are meeting enthusiastic and widespread support in the state.

In order to experience continued growth and prosperity in our industries, we must provide our industrial workers with sound, adequate occupational health and safety

services. Absenteeism because of illness and accidents is a major item of expense to industry and an important factor in the health picture of the state's population. Industry has found through repeated experience that in-plant services return—in reduction of compensation costs alone—much more than the services themselves cost—to say nothing of other savings effected through reduced absenteeism and increased worker efficiency.

We cannot look at a program such as this solely in terms of dollars and cents, because it has implications for the broad welfare of all our people; but neither can we ignore the importance in today's highly competitive economy of an area of service which has demonstrated its effectiveness in reducing costs. The contributions which adequate occupational health services can make in reduced personnel turnover and absenteeism, increased worker efficiency and productivity, and lowered accident frequency can be an important factor in enhancing the competitive position, and hence the growth and prosperity, of North Carolina's industries.

Responsibilities of Industry and Government

Both industry and government have responsibilities in the protection of the health of the worker. The several agencies of the state government which are concerned with this protection will discuss their responsibilities and programs this afternoon. I hope we can take a long look at them and see if they are providing all we should have in the way of consultation, regulation, inspection, research, and other services.

Industry's responsibility, of course, is the provision of in-plant health and safety programs. An important element in determining what the scope and quality of these health services will be is the leadership of the medical profession. We are fortunate that our State Medical Society has had for several years an active committee on occupational health which has been vigorously promoting the understanding and participation of physicians in meeting the growing occupational health needs of industry in the state.

Much progress has been made in occupational health in the state, and some of the developments embody new approaches which offer great promise; but we are not

satisfied with the progress we have made and we stand in danger of lagging behind some of our sister states unless we intensify our efforts to study our needs and to develop sound and effective programs for meeting them.

Predominance of Small Industries

One feature of North Carolina industry which probably accounts for some of the slowness of our progress is the predominance of smaller industries and the wide dispersion of the establishments. Ninety-seven per cent of our manufacturing establishments employ fewer than 500 people, and less than 1 per cent employ more than 1,000 people. Small industry predominates throughout the South, but many southern states have concentrations in one or more metropolitan areas which have provided the opportunity for mutual stimulation and for cooperative development of employee health services.

The pattern of industrial development in North Carolina is one which we feel is thoroughly sound socially and economically. It does, however, present us with the necessity and the challenge to develop our own methods and plans for meeting the needs for employee medical and health services. We should keep this in mind as new industry is developed locally or is brought in. How can adequate services be provided in the large number of widely scattered smaller establishments in North Carolina? What can be done to promote more effort on the part of industry to make adequate provision for employee health services and more active and effective co-operation on the part of physicians with

industry? What services can our medical schools and our School of Public Health provide which will contribute most helpfully to these objectives? What developments do we need in the services of our official state agencies?

Conference Objectives

You can see from what I have said that we have some very specific objectives in this conference. There are, of course, the general objectives of creating more awareness of the problems and of stimulating public and private interest and support for greater effort in this field. However, we hope for more than this. We would like, as a result of our discussions here today, to initiate concrete efforts to set up some goals and guideposts for future progress with respect to both official services and the in-plant services of industry. We realize that with a group this large and a conference this brief it is not possible to formulate well conceived specific recommendations; but I would like to have from you, before you leave here today, an expression of whether you think we might set up a continuing small committee, representing the official agencies, industry, labor, and the medical profession, to study our problems and needs and develop specific recommendations looking to accelerated progress in expanding and strengthening occupational health services. Will you, if you find it proper, express yourselves on this point during the discussion period this afternoon? You might also express yourselves on the possible usefulness of future conferences like this present one.

We are at the very beginning of time for the human race. It is not unreasonable that we grapple with problems. There are tens of thousands of years in the future. Our responsibility is to do what we can, learn what we can, improve the solutions and pass them on. It is our responsibility to leave the men of the future a free hand. In the impetuous youth of humanity, we can make grave errors that can stunt our growth for a long time. This we will do if we say we have the answers now, when we are so young and ignorant; if we suppress all discussion, all criticism, saying, "This is it, boys, man is saved!" and thus doom man for a long time to the chains of authority, confined to the limits of our present imagination. It has been done so many times before. Feynman, R. P.: Science and the Open Channel, Science 123: (Feb. 24) 1956.

BULLETIN BOARD

Preliminary Program
of the
ONE HUNDRED THIRD ANNUAL SESSION
The Medical Society
of the
State of North Carolina
May 5, 6, 7, 8, 1957
ASHEVILLE, NORTH CAROLINA
Headquarters
Battery Park
and
George Vanderbilt Hotels

PROGRAM OF THE MEDICAL SOCIETY

SUNDAY, MAY 5, 1957

- 10:00 A.M.—Executive Council Meeting (Grove Room—Battery Park Hotel)
- 11:00 A.M.—Registration opens, Booth (lower lobby—City Auditorium)
- 1:30 to 5 P.M.—AUDIO-VISUAL PROGRAM—
(City Auditorium—Assembly Hall)
J. Leonard Goldner, M.D., Chairman,
Durham
Duke University School of Medicine,
Postgraduate Instructional Course
in Surgery
W. W. Kitchin, M.D., Moderator,
Clinton
- 3 to 5 P.M.—Postgraduate Instructional
Course in Trauma
R. W. Williams, M.D., Moderator,
Wilmington
Injuries of the Head and Neck
Leroy Allen, M.D., Raleigh
Injuries of the Chest
Arthur Bradsher, M.D., Durham
Injuries of the Abdomen
Hugh Tyner, M.D., Gastonia
Injuries of the Spine
H. F. Forsyth, M.D., Winston-Salem
- 8:00 P.M.—Memorial Service, Charles H. Pugh,
M.D., Chairman, Presiding
Choral Presentation: Boys' Choir,
Christ School Episcopal, Arden
An Address: Rev. Embree H.
Blackard,
Central Methodist Church
Asheville, N. C.
Battery Park Hotel (Gold Room)

MONDAY, MAY 6, 1957

- 9:00 A.M.—General Registration opens, Booth
(lower lobby—City Auditorium)
(Society Members, Delegates, Officials, Guests, Auxiliary members, Technical and Scientific Exhibitors will register in this area.)
- 9:00 A.M.—NORTH CAROLINA BOARD OF
MEDICAL EXAMINERS
Meets for business and hearings
Battery Park Hotel (Grove Room)
- 9:00 A.M.—Technical and Scientific Exhibits open
(City Auditorium—Exhibit Hall)
- 9 to 10 A.M.—AUDIO-VISUAL PROGRAM—
(City Auditorium—Assembly Hall)
Topic: The Eye
(Topics and Discussants will appear in the final program)

10 to 12 Noon—POSTGRADUATE INSTRUCTION COURSE IN OBSTETRICS AND GYNNECOLOGY

C. H. Mauzy, Jr., M.D., Moderator
Title: Bleeding in Pregnancy: Diagnosis and Management.
Bleeding in Early Pregnancy
John H. Monroe, M.D., Winston-Salem
Clotting Defects in Pregnancy
James F. Donnelly, M.D., Raleigh
Placenta Previa
Harold M. Sluder, M.D., Charlotte
Abruptio Placentae
William R. Wellborn, Jr., M.D., Morganton
Postpartum Hemorrhage
Fleming Fuller, M.D., Kinston

10:00 A.M.—SPECIAL MEETING HOUSE OF DELEGATES
G. Westbrook Murphy, M.D., Speaker, Presiding
George Vanderbilt Hotel
(East Ballroom)
An Address: "The Phililoo Bird"
An Illustrated Talk related to Blue Shield

Leonard J. Raider, M.D.,
Vice President
United Medical Service, Inc.,
New York

1:30-3:00 P.M.—CLOSED CIRCUIT TELEVISION PROGRAM—
(City Auditorium—Assembly Room)
FIVE STATE VIDECLINIC
"The Physician and Emotional Disturbance"

Panel Members:

Howard Rome, M.D., Psychiatrist,
Mayo Clinic, Rochester, Minn.
C. H. Hardin Branch, M.D., Psychiatrist, University of Utah,
Salt Lake City
E. Irving Baumgartner, M.D., Secretary, A.M.A. Section on General Practice, Oakland, Md.
Andrew S. Tomb, M.D., Chairman, AAGP Liaison Committee on Mental Health, Victoria, Texas
J. Leonard Goldner, M.D., Durham,
Moderator for Videclinic Audience Participation

2:00 P.M.—First Meeting of the Annual Meeting
THE HOUSE OF DELEGATES of the Medical Society—G. Westbrook Murphy, M.D., Speaker, Presiding
(Agenda will be available) George Vanderbilt Hotel (East Ballroom)
Invocation: Dr. Embree H. Blackard, Central Methodist Church, Asheville, N. C.

2:30 P.M.—Intermission of House of Delegates
(For closed channel telecast)

3:00 P.M.—House of Delegates Reconvenes—
George Vanderbilt Hotel
(East Ballroom)

5:00 P.M.—Scientific and Technical Exhibits close
(Exhibits under supervision of official watchman)

5:00 P.M.—House of Delegates Recess

5:20 P.M.—Social Hour and Entertainment of Medical Society for Technical and Scientific Exhibitors
(The Manor Hotel—The Great Hall)
Entertainment: Southern Attractions Company, music and act
Introduction by:
President Donald B. Koonce, M.D.

- 5:30 P.M.—Social Hour Medical College of Virginia Alumni Association (George Vanderbilt Hotel—Tropical Room)
- 5:30 P.M.—Social Hour University of Maryland Medical Alumni Association (Pisgah Room—Battery Park Hotel)
- 6:00 P.M.—Dinner, Medical College of Virginia and North Carolina Medical College (Combined), (George Vanderbilt Hotel—Vanderbilt Room)
- 6:00 P.M.—Dinner, University of Maryland Medical Alumni Association (Pisgah Room—Battery Park Hotel)
- 6:00 P.M.—Social Hour, N. C. Society of Internal Medicine (Rhododendron Room)
- 7:00 P.M.—Dinner Business Meeting, N. C. Society of Internal Medicine Battery Park Hotel (Rhododendron Room)
- 8:00 P.M.—HOUSE OF DELEGATES of Medical Society reconvenes George Vanderbilt Hotel (East Ballroom)

TUESDAY, MAY 7, 1957

BREAKFAST FOR OFFICERS OF STATE AND COUNTY SOCIETIES

- 7:30 A.M.—All County Society Officers, Committee Members of the State Society and State Society Officials will assemble in George Vanderbilt Hotel (East Ballroom)
President Donald B. Koonce, M.D., Presiding
- 8:20 A.M.—An Address: "Political Stew"
Walter L. Portteus, M.D., Past President Indiana State Medical Association, Franklin, Indiana
- 8:50 A.M.—Announcements
- 8:55 A.M.—Adjournment

PROGRAM

Tuesday, May 7, 1957

- 8:45 A.M.—Scientific and Technical Exhibits open (City Auditorium—Exhibit Hall)
- 9:00 A.M.—Registration opens, Booth (lower lobby—City Auditorium)

FIRST GENERAL SESSION

TUESDAY, MAY 7, 1957

(City Auditorium—Assembly Hall)

- 9:00 A.M.—Call to Order, Millard D. Hill, M.D., Chairman, Committee on Arrangements
Invocation: Rev. Cornelius A. Zabriske, Rector, All Souls Episcopal Church, Biltmore
Announcements: Secretary Hill
Recognition and presentation of President Donald B. Koonce, M.D., Wilmington

(Time Tentative)

- 9:05 A.M.—Recognition of Distinguished Guests
- 9:10 A.M.—Report of Committee on Awards:
Rowland T. Bellows, M.D., Chairman, Charlotte
Recognition and presentation of Moore County, Wake County, and Gaston County Awardees
Associates, Committee on Scientific Awards:
Charles M. Norfleet, Jr., M.D., Winston-Salem
E. D. Shackelford, Jr., M.D., Asheboro
Wm. M. Long, M.D., Mocksville
George W. James, M.D., Greensboro
Wm. O. Beavers, M.D., Greensboro

Douglas McKay Glasgow, M.D., Charlotte

Bruce B. Blackmon, M.D., Buies Creek
Robert N. Creadick, M.D., Durham
Wm. H. Sprunt, Jr., M.D., Chapel Hill

- Emory Hunt, Consultant, Chapel Hill
- 9:30 A.M.—An Address: Population Changes in the South and Medical Practice.
Matthew Tayback, D.Sc., Director, Statistical Section, City Health Department, Baltimore, Md.; Research Associate, Johns Hopkins School of Hygiene and Public Health and Associate Professor of Preventive Medicine, School of Medicine, University of Maryland (From Section on Public Health and Education)
- 9:50 A.M.—An Address: Management of Parotid Tumors
Erle E. Peacock, M.D., University of North Carolina, School of Medicine, and Louis T. Byar, M.D., Washington University, St. Louis, Mo. (From Section on Surgery)
- 10:10 A.M.—An Address: Carcinoma of the Lung
William F. Reinhoff, M.D., Associate Professor of Surgery, Johns Hopkins University, Baltimore, Maryland
- 10:40 A.M.—An Address: Frustration or Fruition.
Mr. Leo Brown, Director of Public Relations, American Medical Association, Chicago
- 11:10 A.M.—An Address: The End Result and Prognosis of Gastric Cancer.
Gordon McNeer, M.D., Associate Attending Surgeon, New York Memorial Hospital, New York City.
- 11:40 A.M.—The Annual Address of the President, Donald B. Koonce, M.D., President The Medical Society of the State of North Carolina, Wilmington
- 12:00 Noon—Presentation High School Essay
- 12:15 P.M.—Announcements
- 12:20 P.M.—Adjournment
- 1:00 P.M.—Skeet Shoot, Asheville Wildlife Skeet Field.

ALUMNI LUNCHEONS

Tuesday, May 7, 1957, 1:00 P.M.

- Duke University Medical School Alumni Luncheon, T. L. Peele, M.D., Secretary, Durham. 1:00 P.M., Tuesday, May 7.
Notify the Secretary at Box 3811, Duke Hospital, Durham (George Vanderbilt Hotel—Vanderbilt Room)
- Wake Forest Alumni of Bowman Gray School of Medicine Luncheon, (Battery Park Hotel—Rhododendron Room)
- Jefferson Medical College Alumni Association Luncheon (Battery Park Hotel—Pisgah Room)

SECTION ON SURGERY

Tuesday, May 7, 2:30 P.M.
(Gold Room, Battery Park)

- L. Gordon Sinclair, M.D., Chairman, Raleigh
- PANEL DISCUSSION
- A. Subject: Nodular Goiter
Adolescent Goiter, Treatment and Sequela
Theodore S. Raiford, M.D., Asheville
Nodular Goiter, Etiology, Treatment and Incidence of Carcinoma
Hubert McN. Poteat, Jr., M.D., Smithfield
Surgical Treatment of Cancer of Thyroid
Isaac E. Harris, Jr., M.D., Durham
Biological Considerations in the Management of Thyroid Cancer
Colin G. Thomas, Jr., M.D., School of Medicine, University of North Carolina, Chapel Hill

B. Management of Parotid Tumors
 Erle E. Peacock, Jr., M.D., School of Medicine,
 University of North Carolina, Chapel Hill
 (Before First General Session)
 Reporter: Miss Chloe Hodge, Raleigh

SECTION ON GENERAL PRACTICE OF MEDICINE

Tuesday, May 7, 2:30 P.M.
 (West Ballroom, George Vanderbilt)
 L. H. Robertson, M.D., Chairman, Salisbury
 Pelvic Endometriosis, Its Diagnosis and Importance
 Robert A. Ross, M.D., Professor of Obstetrics
 and Gynecology
 School of Medicine, University of North Carolina,
 Chapel Hill
 The Abdominal Condition Not Cured by Surgery
 T. Lynch Murphy, M.D., Salisbury
 Some of the New and Potentially Dangerous Drugs
 James P. Hendrix, M.D., Associate Professor of
 Medicine and Therapeutics,
 Duke University School of Medicine, Durham
 Injuries of the Hand — Treatment
 J. Leonard Goldner, M.D., Associate Professor of
 Orthopedic Surgery,
 Department of Surgery, Duke University School
 of Medicine, Durham
 Question and Answer period.
 Reporter: Miss Margaret Heustess, Columbia,
 S. C.

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

Tuesday, May 7, 2:30 P.M.
 (East Ballroom—George Vanderbilt Hotel)
 E. E. Moore, M.D., Chairman, Asheville
 Metastatic Disease of the Optic Nerve
 Sprinza Weizenblatt, M.D., Asheville
 Cataract Extractions Following Filtering Operation—a movie
 S. D. McPherson, M.D., Durham
 George W. Fisher, M.D., Durham
 Pseudo Primary Cholesteatoma of the Middle Ear
 Hooper Johnson, M.D., Winston-Salem
 John Ausband, M.D., Winston-Salem
 Optical Aids for Subnormal Vision
 Charles W. Tillett, M.D., Charlotte
 S. D. McPherson, M.D., Durham
 Cholesteatoma Secondary to Gunshot Wound
 William F. Powell, M.D., Asheville
 Reporter: Mrs. Fanny Sweeney, New York

SECTION ON PEDIATRICS

Tuesday, May 7, 2:30 P.M.
 (Pisgah Room, Battery Park)
 Elizabeth Conrad, M.D., Chairman, Winston-Salem
 Bladder Neck Obstructions in Infants
 Joseph W. Hooper, Jr., M.D., Wilmington
 Some Aspects of the Evaluation and Management
 of Convulsive Disorders in Childhood
 Harrie R. Chamberlin, M.D., Assistant Professor of
 Pediatrics
 UNC School of Medicine, Chapel Hill
 Symposium on Allergies in Pediatrics
 Mary Margaret McLeod, M.D., Sanford; Charles
 M. Howell, Jr., M.D., Winston-Salem; Alanson
 Hinman, M.D., Winston-Salem
 Reporter: Mrs. Harry Thompson, Asheville

SECTION ON PUBLIC HEALTH AND EDUCATION

Tuesday, May 7, 2:30 P.M.
 (Rhododendron Room, Battery Park Hotel)
 Walter C. Humbert, M.D., Chairman, Greenville
 A Pediatrician Looks At Public Health
 Earl G. Trevathan, Jr., M.D., Greenville

Psittacosis

J. H. Tuthill, M.D., Field Epidemiologist, USPH
 Service, Raleigh
 Tuberculosis Control — Divide and Conquer
 Robert F. Young, M.D., Halifax
 Population Changes in the South and Medical
 Practice.

Matthew Tayback, D. Sc., Director, Statistical
 Section, City Health Department, Baltimore,
 Md.; Research Associate, Johns Hopkins School
 of Hygiene and Public Health and Associate
 Professor of Preventive Medicine, School of Medicine,
 University of Maryland.
 (Before First General Session)
 Reporter: Wm. H. Stephenson, Garner

SECTION ON ANESTHESIA

Tuesday, May 7, 2:30 P.M.
 (Vanderbilt Room, George Vanderbilt)
 John C. Montgomery, M.D., Chairman, Charlotte
 SUBJECT: The Present Status of Inhalation
 Drugs In Anesthesia
 Ethyl Chloride, Vinyl Ether and Ethyl Ether
 LeRoy Crandell, M.D., Bowman Gray School of
 Medicine, Winston-Salem
 Nitrous Oxide, Ethylene, and Cyclopropane
 John R. Hoskins, M.D., Asheville
 Chloroform, Trichlorethylene and Fluothane
 Leo Fabian, M.D., Duke Hospital, Durham
 "The Mechanics of Breathing," Manus R. Spanier,
 Student, Bowman Gray School of Medicine,
 Winston-Salem
 Reporter: Royce Pipkin, Raleigh

5:45 P.M.—Exhibits Close

PRESIDENT'S DINNER

Tuesday, May 7, 1957
 (City Auditorium—Assembly Hall)
 7:00 P.M.—Banquet (Admission by ticket only)
 Toastmaster: Graham B. Barefoot,
 M.D., Wilmington
 Invocation: Rt. Rev. Thomas H.
 Wright, D.D., Bishop of the Diocese of
 East Carolina, Wilmington
 7:50 P.M.—Presentation of Guests
 8:00 P.M.—Presentation of President's Jewel
 (person presiding to come)
 8:10 P.M.—Installation of President-Elect, Edward
 W. Schoenheit, M.D., Asheville
 Administration of the authorized Oath
 of Office of President Donald E.
 Koonce, M.D.
 An Address in Acceptance
 Edward W. Schoenheit, M.D., President
 Address: Hon. Donald B. Hock,
 Allentown, Pa.
 Banquet Entertainment—Floor Show
 Ingram Agency, Philadelphia
 Adjournment
 11:15 P.M.—PRESIDENT'S BALL
 (City Auditorium—Assembly Hall)

SECOND GENERAL SESSION

Wednesday, May 8, 1957
 9:00 A.M.—Convening Session
 John S. Rhodes, M.D., First Vice
 President, Raleigh, presiding
 Announcements
 CONJOINT SESSION
 (City Auditorium—Assembly Hall)
 9:05 A.M.—Conjoint Session of the North Carolina
 State Board of Health
 G. Grady Dixon, M.D., President, North
 Carolina State Board of Health will
 preside over this meeting of the Medi-

cal Society of the State of North Carolina and the State Board of Health

RECOVERING SECOND GENERAL SESSION

(Time Tentative)

John S. Rhodes, M.D., Presiding

9:30 A.M.—An Address: Looking Ahead Toward the Next Year

George F. Lull, M.D., Secretary and General Manager, American Medical Association, Chicago

10:00 A.M.—An Address: Things of Good Report
F. J. L. Blasingame, M.D., Member of Board of Trustees, American Medical Association, Wharton, Texas

10:30 A.M.—An Address: The Diagnosis and Treatment of Epilepsy
Frederick A. Gibbs, M.D., Professor of Neurology, University of Illinois, Chicago
(From Section on Neurology and Psychiatry)

11:00 A.M.—An Address: Radiation Hazards in Diagnostic Radiology
Richard H. Chamberlain, M.D., Professor of Radiology, University of Pennsylvania, Philadelphia
(From Section on Radiology)

11:30 A.M.—The Effect of Prolonged Continuous Therapy on the Course of Chronic Recurring Peptic Ulcer
David Cayer, M.D., (Essayist) Frank M. Sohmer, M.D., Winston-Salem and J. M. Ruffin, M.D., and M. Tyor, M.D., Durham
(From Section on Internal Medicine)

11:50 A.M.—The Society's Program on Professional Liability Insurance
Mr. John Parish, Secretary, Saint Paul Fire and Marine Insurance Company, St. Paul, Minnesota

12:20 P.M.—An Address by the President
Edward W. Schoenheit, M.D., Asheville

12:40 P.M.—Elections:
(a) Trustee of the North Carolina Hospital Saving Association (3 year term to expire June 1960)
(b) Member North Carolina Medical Care Commission (4 year term to expire June 1962)

12:50 P.M.—Presentation of Prizes

1:00 P.M.—Adjournment

1:30 P.M.—EDITORIAL BOARD Luncheon
(Battery Park Hotel—Green Room)

ALUMNI LUNCHEONS

Wednesday, May 8, 1957

The University of Pennsylvania Medical School
Alumni Association Luncheon
(Battery Park Hotel—Rhododendron Room)

SECOND MEETING OF THE HOUSE OF DELEGATES

Wednesday, May 8, 2:30 P.M.

(George Vanderbilt Hotel—East Ballroom)
(Agenda will be available)

SECTION ON OBSTETRICS AND GYNECOLOGY

Wednesday, May 8, 2:30 P.M.

(Battery Park Hotel—Gold Room)

Leonard Palumbo, Jr., M.D., Chairman, Chapel Hill
Use of Diamox in Pregnancy

John Ashe, M.D., Concord

Abnormal Response to Testosterone Therapy

Joseph B. McCoy, M.D., and W. Z. Bradford, M.D., Charlotte

Sarcoidosis: The Effects of Pregnancy and Subsequent Corticoid Therapy on the Course of the Disease

William A. Peters, M.D., and Walter Spaeth, M.D., Elizabeth City

Puerperal Gynecology

Trent Busby, M.D., Salisbury

Reporter: Wm. H. Stephenson, Garner

SECTION ON NEUROLOGY AND PSYCHIATRY

Wednesday, May 8, 2:30 P.M.

(Rhododendron Room, Battery Park Hotel)

Joseph B. Parker, Jr., M.D., Chairman, Durham
Trends in the Development of an Open Psychiatric Hospital

John Patton, M.D.; R. Charman Carroll, M.D.; Robert L. Craig, M.D.; Marie Baldwin, M.D., and Anne Sagberg, M.D., Asheville

Discussant: Walter A. Sikes, M.D., Raleigh
Follow-Up Studies on Use of Thorazine and Reserpine in State Hospital Patients.

Robert N. Harper, M.D., Raleigh

Discussant: (To be designated)

Observations of Patients Diagnosed Diffused Cerebral Atrophy

Robert W. Willett, M.D., Raleigh

Discussant: (To be designated)

The Diagnosis and Treatment of Epilepsy

Frederick A. Gibbs, M.D., Professor of Neurology and Director of Division of Electroencephalography of University of Illinois, Chicago

(Before Second General Session)

Reporter: Miss Chloe Hodge, Raleigh

SECTION ON RADIOLOGY

Wednesday, May 8, 2:30 P.M.

James S. Raper, M.D., Chairman, Asheville

(Pisgah Room, Battery Park Hotel)

Panel Discussion

Subject: Diagnosis of Diseases of the Gall Bladder and Common Duct

Moderator: Isadore Meschan, M.D., Professor of Radiology, Bowman Gray School of Medicine, Winston-Salem

Participants: Robert J. Reeves, M.D., Professor of Radiology, Duke University School of Medicine, Durham
Phillip M. Johnson, M.D., North Carolina Memorial Hospital, Chapel Hill

James Martin, M.D., Assistant Professor of Radiology, Bowman Gray School of Medicine, Winston-Salem

Intermission

Panel Discussion

Subject: The Uses of Radioactive Isotopes in Medicine

Moderator: Isadore Meschan, M.D., Professor of Radiology, Bowman Gray School of Medicine, Winston-Salem

Participants: William H. Sprunt, III, M.D., Professor of Radiology, UNC School of Medicine, Chapel Hill
Joseph K. Isley, M.D., Medical Director, Isotope Laboratory, Duke University School of Medicine, Durham

Richard H. Chamberlain, M.D., Professor Radiology, University of Pennsylvania School of Medicine, Philadelphia

Radiation Hazards in Diagnostic Radiology

Richard H. Chamberlain, M.D., Professor of Radiology, University of Pennsylvania School of Medicine, Philadelphia

(Before Second General Session)

Reporter: Miss Margaret Heustess, Columbia, S. C.

SECTION ON PATHOLOGY

Wednesday, May 8, 2:30 P.M.

J. U. Gunter, M.D., Chairman, Durham

(East Ballroom, George Vanderbilt Hotel)

PANEL DISCUSSION:

Subject: Recent Man-Made Pathological Processes

Moderator: J. U. Gunter, M.D., Chairman, Durham

Participants:

Disease States Resulting From Steroid Therapy

Walter R. Benson, M.D., Chapel Hill

Disease States Resulting from Antibiotic Therapy

Bernard F. Fetter, M.D., Durham

Disease States Resulting From Chemotherapy

H. Lee Large, Jr., M.D., Charlotte

Disease States Resulting From Certain Drugs

Roger W. Morrison, M.D., Asheville

Disease States Resulting From Miscellaneous

Therapeutic Measures

Thomas N. Lide, M.D., Winston-Salem

Intermission

Question and Answer Period

Reporter: Mrs. Fanny Sweeney, New York

SECTION ON INTERNAL MEDICINE

Wednesday, May 8, 2:30 P.M.

James W. Woods, M.D., Chairman, Chapel Hill

(West Ballroom, George Vanderbilt Hotel)

Oral Therapy of Diabetes Mellitus

Emery C. Miller, M.D., Winston-Salem

Considerations in the Diagnosis of Hirsutism

Harry T. McPherson, M.D., Durham

Significance of Verbalization in the Shift of Allergic Symptoms

Austin T. Hyde, Jr., M.D., Rutherfordton

The Effect of Potassium Depletion on the Kidney

Walter Hollander, M.D., Chapel Hill

Thrombotic Thrombocytopenic Purpura, A Case Report

Rod M. Buie, Jr., M.D., Greensboro

The Effect of Prolonged Continuous Therapy on the Course of Chronic Recurring Petic Ulcer.

David Caver, M.D., Frank M. Sohmer, M.D., J.

M. Ruffin, M.D., and M. Tyor, M.D., Winston-Salem and Durham

(Before Second General Session)

Reporter: Mrs. Harry Thompson, Asheville

THIRD GENERAL SESSION

Wednesday, May 8, 1957

President Edward W. Schoenheit, M.D., Asheville, presiding

(West Ballroom, George Vanderbilt Hotel)

5:00 P.M.—Presentation of Fifty Year Certificates

5:15 P.M.—Report of the House of Delegates

5:20 P.M.—Unfinished Business

5:25 P.M.—New Business

5:30 P.M.—Installation of officers elected by 1957 House of Delegates

5:40 P.M.—Remarks by the President

5:45 P.M.—Adjournment Sine die

THIRTY-FOURTH ANNUAL MEETING

OF THE

AUXILIARY TO THE MEDICAL
SOCIETY OF THE STATE OF
NORTH CAROLINA

PROGRAM

Sunday, May 5, 1957

8:00 P.M.—Memorial Service—Goldroom,
Battery Park Hotel (Gold Room)
To honor deceased Medical Society and
Auxiliary Members.
Mrs. Charles T. Grier, Memorials
Chairman

Monday, May 6, 1957

9:00 A.M.—Registration—Lower Lobby, City Auditorium

9:00 A.M.—Golf Tournament—Beaver Lake Golf Club. Auxiliary Members only, Valuable prizes

Mrs. B. H. Hartman, Chairman

9:00 A.M.—Finance Committee—Mountaineer Room, Grove Park Hotel

10:00 A.M.—Executive Committee—Mountaineer Room, Grove Park Hotel

11:00 A.M.—Board of Directors—Mountaineer Room, Grove Park Hotel

Reports and Recognition

Officers

Committee Chairman

Councilors

Nomination of the Nominating Committee

Advisory Committee Chairman

Roscoe D. McMillan, M.D.

Unfinished and New Business

2:00 P.M.—Tour of Biltmore Estate

(Men Welcome)

Busses leave the Auditorium at

2:00 P.M. Mrs. Boyd Owen, Chairman

7:30 P.M.—Round Table Discussion—Mountaineer Room, Grove Park Hotel

Mrs. Donnie M. Royal, presiding

(Open especially for outgoing and

incoming Chairmen, Councilors and

County Presidents and interested

Auxiliary Members)

Tuesday, May 7, 1957

9:00 A.M.—Registration—Lower lobby, City Auditorium—Late Comers—

Great Hall, Grove Park Hotel

9:00 A.M.—Annual Meeting of the House of Delegates of the Auxiliary to the Medical Society of the State of North Carolina

Mountaineer Room, Grove Park Hotel

10:45 A.M.—Intermission (Cokes will be served through the courtesy of the Coca-Cola Bottling Co., Asheville)

Mrs. J. B. Anderson, Chairman

Mrs. B. E. Morgan, Co-Chairman

11:00 A.M.—General Meeting of the Auxiliary to the Medical Society of the State of North Carolina

11:45 A.M.—Presentation of Past Presidents' Pins

Donald B. Koonce, M.D., President

Medical Society of the State of North Carolina

12:00 Noon—Installation of Officers

Mrs. Paul P. McCain, Chairman of

Past Presidents

12:15 P.M.—Adjournment

1:00 P.M.—Luncheon and Fashion Show—Plantation Room, Grove Park Hotel

Honoring Mrs. Clark Bailey, 2nd Vice

President, Auxiliary to the A.M.A.;

Mrs. O. W. Robinson, President of the

Auxiliary to the S.M.A.

Fashions by: John Carroll Specialty Shop

7:00 P.M.—President's Dinner—City Auditorium—Assembly Hall

11:15 P.M.—President's Ball—City Auditorium—Assembly Hall

George Vanderbilt Hotel

Wednesday, May 8, 1957

10:30 A.M.—Bridge Party—Laurel Room, Grove Park Hotel. Valuable prizes

Mrs. J. T. Littlejohn, Chairman

COMING MEETINGS

Medical Society of the State of North Carolina, One Hundred Third Annual Meeting—Asheville, May 6-8.

North Carolina Trudeau Society, Annual Meeting—Battery Park Hotel, Asheville, April 8.

Nathalie Gray Bernard Lecture Series—Bowman Gray School of Medicine of Wake Forest College, Winston-Salem, April 8 and 9.

Forsyth County Medical Society Cancer Symposium — Robert E. Lee Hotel, Winston-Salem, April 11.

Fourth Annual Program in General Medicine—University of North Carolina School of Medicine, April 16 and 17.

North Carolina State Board of Medical Examiners, meetings to interview candidates for license by endorsement—Battery Park Hotel, Asheville, May 5, and Sir Walter Hotel, Raleigh, June 18; written examination—Sir Walter Hotel, Raleigh, June 17-20.

American Board of Obstetrics and Gynecology, oral and clinical examinations for all candidates—Edgewater Beach Hotel, Chicago, May 16-25.

American College of Chest Physicians, Annual Meeting—Hotel Commodore, New York City, May 29-June 2.

American Medical Association, One Hundred Sixth Annual Meeting—New York City, June 3-7.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST COLLEGE

Plans are being completed for a luncheon meeting of the medical alumni of Wake Forest College and its Bowman Gray School of Medicine on May 7 at the Battery Park Hotel in Asheville. The annual scientific and business session of the medical alumni association will be held in Winston-Salem October 25-26.

* * *

Dean C. C. Carpenter has announced plans for the construction of a two-million dollar addition to the Bowman Gray School of Medicine to increase the teaching, research, and library facilities. The fund-raising campaign, the first since the establishment of the school in Winston-Salem in 1941, was begun in November and is continuing under the leadership of Mr. P. Huber Hanes, Sr., chairman of the board of the P. H. Knitting Company.

* * *

Dr. Manson Meads is devoting additional time to the administrative duties of associate dean, and will relinquish the directorship of the Department of Preventive Medicine on July 1. He will remain active in the educational and research programs as professor of internal medicine.

* * *

The promotion of Dr. C. Nash Herndon to professor of preventive medicine and director of the department will become effective July 1.

* * *

Dr. J. Maxwell Little has been named assistant dean in charge of student affairs. Dr. Little, professor of pharmacology and associate professor of physiology, has served as registrar and is now extending his duties in the area of student affairs. He will continue his academic duties in the Department of Physiology and Pharmacology.

* * *

Recent faculty appointments include Dr. Julius A. Howell, instructor in surgery (plastic surgery); and Dr. G. Erick Bell, Jr., instructor in orthopedic surgery. Also, Dr. Richard R. Glenn has been appointed to the staff as assistant in clinical pediatrics.

* * *

Dr. J. H. Smith Foushee, Jr., instructor in pathology, participated in a three-day seminar at the Sloan Kettering Division of Cornell University Medical College March 4-6. The seminar, "Transplantable human tumors," was limited to an enrollment of 25, and Dr. Foushee was one of two North Carolina pathologists accepted for the course.

* * *

Dr. Harold D. Green, professor of physiology and pharmacology, attended the biophysics meeting in Columbus, Ohio, March 4-6.

* * *

At the scientific meeting of the American College of Surgeons in Washington, Dr. Frank R. Lock, professor of obstetrics and gynecology and a governor in the American College of Surgeons, presented a paper, "Indications for Hysterectomy," on March 19.

On the following day Dr. Howard H. Bradshaw, professor of surgery and secretary of the board of governors of the American College of Surgeons, presented a paper, "Bronchogenic Cancer."

* * *

Drs. Richard T. Myers, Felda Hightower, Frank R. Johnston, and Louis Shaffner attended the meeting of the North Carolina Surgical Association in Hot Springs, Virginia, March 21-24. Dr. Shaffner presented a paper on "Imperforate Anus," and participated in a panel discussion of Children's Surgery. Dr. Hightower will also attend the meeting of the Southern Surgeons Club in Little Rock on March 24-27.

* * *

The Nathalie Gray Bernard lecture series will be given this year by Dr. Henry Ricketts of the University of Chicago. On the evening of April 8 he will present a paper, "Objectives in the Treatment of Diabetes"; and on April 9 he will speak on "Present Status of Serum Lipids in the Pathogenesis of Atherosclerosis." Members of the medical profession are cordially invited to attend these lectures.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

A new organization, to be called the Parents' Club, has been proposed for the University of North Carolina School of Medicine, according to an announcement by Dr. Samuel E. Howie, minister of the Highland Presbyterian Church of Fayetteville, North Carolina, chairman of the organization committee. The committee met at the School of Medicine recently.

An organizational meeting for the proposed new club will be held at the University of North Carolina on April 13. Parents of medical students now enrolled in the school and alumni of the Medical School are invited to attend.

Members of the Organization Committee for the Parents' Club are: Dr. Howie; John S. Patterson, Deputy Administrator of Veterans Affairs, Veterans Administration, Washington, D. C.; J. P. Hobson, Charlotte banker; Dr. Palmer A. Shelburne, Greensboro physician; Victor G. Herring, Jr., Goldsboro businessman; and Sam G. Jenkins, Tarboro businessman.

* * *

Medical Alumni Day at the U. N. C. School of Medicine has been set for Thursday, April 18, Dr. Adam T. Thorp, president of the Medical Alumni Association has announced. All alumni are cordially invited and urged to attend the activities planned for this occasion.

* * *

The Fourth Annual Program in General Medicine will be held April 16 and 17 immediately preceding Alumni Day, according to Dr. W. P. Richardson, Assistant Dean for Continuation Education. A special feature in connection with the post-graduate program is the annual Lecture of the Phi Chi Medical Fraternity, which this year will be delivered by Dr. David A. Cooper ('19), professor of clinical medicine, University of Pennsylvania School of Medicine. Printed programs will be mailed to all North Carolina physicians at an early date.

* * *

Seven speakers spoke on subjects concerning occupational health at the University of North Carolina recently.

This was the Fourth Annual Seminar on Occupational Health. It was sponsored by the University North Carolina School of Medicine, the Occupational Health Committee of the Medical Society of the State of North Carolina, and the Liberty Mutual Insurance Company.

This year the program ~~was~~ dealt largely with a few of the most significant problems in occupational health. This was planned to give practical help and guidance to the physician engaged in industrial work.

The speakers were Dr. Mac Roy Gasque, Ecusta

Paper Company, Pisgah Forest; Dr. H. R. Bra-shear, Jr., and Dr. David R. Hawkins, both of the University of North Carolina School of Medicine; Dr. J. Lamar Callaway, Duke University School of Medicine; and Drs. Joseph M. Hitch, Newton D. Fischer, and Eugene Hargrove, all of the University of North Carolina School of Medicine.

* * *

Dr. Carl E. Anderson, associate professor of the Department of Biological Chemistry, University of North Carolina School of Medicine has been granted \$15,400. The grant came from the Life Insurance Medical Research Fund of New York.

Dr. Anderson, associate professor of the Department of Biological Chemistry and Nutrition, will use the money for further support of research on the chemistry of metabolism of acetal phosphatides. The grant will cover a two-year period beginning in July of this year.

* * *

Dr. John B. Graham, associate professor of pathology, University of North Carolina School of Medicine, spoke recently at Johns Hopkins Hospital in Baltimore.

Dr. Graham's lecture, entitled "Heritable Disorders of the Clotting Mechanism," was given in connection with a course in human genetics that is being offered there.

Dr. Graham is a former Markle Scholar in Medical Science. He is a native of Goldsboro and a University of North Carolina graduate of 1940. His medical degree was awarded by Cornell University in 1942. Dr. Graham joined the faculty of the University of North Carolina School of Medicine in 1946.

* * *

Professor Lucie Jessner and Professor David A. Young of the Department of Psychiatry have just completed a series of 15 weekly seminars which they conducted at the Washington Psychoanalytic Institute in Washington, D. C., as members of the faculty of the Institute.

Professor George C. Ham, chairman of the Department of Psychiatry, will conduct 15 weekly seminars for advanced students at the Washington Psychoanalytic Institute during the winter and spring.

* * *

The third annual Lee B. Jenkins Memorial Lecture was given before the combined staff of the University of North Carolina School of Medicine recently.

This year the lecture was delivered by Dr. Gilbert Mudge of Johns Hopkins University Medical School. His topic was "Mercurial Diuretics."

The lecture was established by Mrs. Lee B. Jenkins of Kinston in honor of her late husband, distinguished civic minded industrialist of that city.

Dr. Mudge explained new methods involved in traditional ways of getting rid of certain body

wastes in connection with treatment of severe diseases.

* * *

The following research grants have been awarded to members of the Department of Medicine of the University of North Carolina School of Medicine.

Dr. T. Franklin Williams, instructor in medicine and preventive medicine,—\$1,000 for heart research by the Rowan-Davie Heart Association Research Fund.

Dr. Jeffress G. Palmer, assistant professor of medicine,—\$21,942; for a study entitled "Cooperative Study in Cancer Chemotherapy," by U.S. Public Health Service, for the period from December 1, 1956 through November 30, 1957.

Dr. Kerr L. White, assistant professor of medicine and preventive medicine,—\$41,975 for three years, \$11,845 the first year, January 1, 1957 through December 31, 1957, for "A Study of Life Situations, Emotions and Central Venous Pressure," from the National Heart Institute, U.S. Public Health Service. The work will be carried out with Dr. Dan A. Martin, Fellow in the Department of Medicine.

Dr. Carl W. Gottschalk, assistant professor in medicine,—\$6,000, to be supplemented each year for a period of five years, July 1, 1957, through June 30, 1958. An award to Dr. Gottschalk as an Established Investigator from the Research Committee of the American Heart Association. These funds will be used for a micropuncture study of kidney function.

* * *

Two postgraduate courses in medicine began in Hickory and Statesville on March 5-6. The courses are being sponsored by the University of North Carolina School of Medicine and the University of North Carolina Extension Division. Co-sponsor for the Hickory course is the Catawba County Medical Society. The Statesville course will be co-sponsored by the Iredell-Alexander Medical Society.

The Hickory course, beginning Tuesday, March 5, will cover a six-week period through April 9. The meetings will be held every Tuesday at the Catawba Country Club. An afternoon lecture will be given at 4:30 p.m. followed by another lecture at 7:30 p.m.

The Statesville course, beginning Wednesday, March 6, will be held every Wednesday through April 10. The afternoon lecture will be given at 5:00 p.m., followed by another lecture at 7:30 p.m. All meetings at Statesville will be held at the Statesville Country Club.

A number of the faculty members of the U.N.C. School of Medicine will lecture at the two courses as well as visiting professors.

The following physicians will lecture at one or more meetings of both courses: Dr. K. W. Chapman, National Institute of Mental Health, Bethesda, Maryland; Dr. T. Grier Miller, University of Pennsylvania School of Medicine; Dr. Leonard

Palumbo, University of North Carolina School of Medicine; Dr. Horace L. Hodes, Mt. Sinai Hospital, New York; Dr. David A. Davis, University of North Carolina School of Medicine; Dr. Robert L. McMillan, Bowman Gray School of Medicine; Dr. James W. Woods and Dr. Erle Peacock, both of the University of North Carolina School of Medicine.

* * *

Some 400 persons attended North Carolina's Third Conference on Handicapped Children which got underway at 2 p.m. Thursday, February 28 at Memorial Hospital at the University of North Carolina. The two-day meeting was sponsored by the Coordinating Committee on Handicapped Children of the North Carolina Health Council, the North Carolina Association for Speech Therapists, and the Nemours Foundation. The University of North Carolina School of Medicine served as host to the meeting.

Visiting speakers and consultants were Dr. Herbert K. Cooper, director, Cleft Palate Clinic, Lancaster, Pennsylvania; Dr. Jon Eisenson, Director, Speech and Hearing Clinic, Queens College, Flushing, N. Y.; Dr. William G. Hardy, director, Speech and Hearing Center, The Johns Hopkins School of Medicine and Hospital, Baltimore, Maryland; Dr. Orvis C. Irwin, professor of psychology, State University of Iowa, Iowa City, and Dr. Wendell Johnson, professor, speech pathology and psychology, also of the State University of Iowa.

In addition, a large number of specialists in different aspects of speech and hearing from within North Carolina participated as panel members, group discussion leaders and consultants.

The program covered various aspects of the problems of speech and hearing in children. One feature of the two-day program was a class demonstration by the North Carolina School for the Deaf.

NEWS NOTES FROM THE DUKE UNIVERSITY SCHOOL OF MEDICINE

Dr. Bayard Carter, chairman of the Duke Department of Obstetrics and Gynecology, is one of several representatives of American obstetrical and gynecological societies invited to attend the meeting of the First Asiatic Congress on Obstetrics and Gynecology, to be held in Tokyo, Japan, April 3-6. He will deliver an address on cancer of the uterus.

Dr. Carter, who is president of the American Association of Obstetricians and Gynecologists and the American Board of Obstetrics and Gynecology, will give medical lectures at five foreign universities on his way to Japan. They are the University of London, Athens, Pakistan and Hong Kong, and Taiwan National University. He is scheduled to return to Duke late in April following a tour of Japan.

* * *

Duke University psychiatrist Leslie B. Hohman was installed as president of the American Psychopathological Association in New York City on February 23.

Named vice-president in 1955 and president-elect last year, Dr. Hohman succeeds Dr. Howard S. Liddell of Cornell University to the presidency. The Association is composed of leading psychiatrists from throughout the United States who are active in research.

Installation ceremonies were held at the end of a two-day meeting devoted to study of "Problems of Drug Addiction."

Dr. Hohman, professor of psychiatry in the Duke University Medical School, is a former president of the National Academy of Cerebral Palsy. He currently heads the North Carolina Society for Crippled Children and Adults.

* * *

Dr. Kenneth E. Penrod of the Duke University School faculty has been named to the editorial board of the *Journal of Medical Education*.

The monthly journal is the official publication of the Association of American Medical Colleges.

Dr. Penrod, associate professor of physiology and pharmacology, is also assistant to the dean of the Duke Medical School. A native of Blanchester, Ohio, he studied at Miami, Ohio University, and at Iowa State College. He taught at the Boston University School of Medicine before joining the Duke medical faculty in 1950.

* * *

Russell Jordan has been named director of Duke Hospital's Out-Patient Department, according to an announcement by Hospital Superintendent F. Ross Porter.

Formerly business manager of the medical out-patient clinics at Duke, Jordan will head administrative reorganization of the entire Out-Patient Department in preparation for moving into the hospital's new \$3,386,000 addition this spring. The department comprises 32 out-patient clinics and 10 out-patient diagnostic laboratories.

Each year some 125,000 patient visits are made to the clinics, which provide treatment for persons unable to bear all of their medical expense.

The Duke Out-Patient Department is tentatively scheduled to occupy its new quarters in the hospital addition around April 1. Located on the first three floors of the seven-story addition, the new quarters will relieve present crowded conditions, reduce patient waiting time and provide faster, more efficient medical service.

* * *

The second of four Heart Disease Institutes for Tar Heel public welfare and vocational rehabilitation workers was held at Duke University, February 12-15. Conducted under provisions of a \$10,000 grant made to Duke Hospital's Social Service Division by the National Heart Institute of the U. S. Department of Health, Education and Wel-

fare, the institutes are designed to give participants a better acquaintance with new trends in the treatment and rehabilitation of heart disease patients.

Cooperating with Duke Hospital in the training program are the North Carolina Boards of Public Welfare and Public Health, the North Carolina Division of Vocational Rehabilitation, and the North Carolina Heart Association.

* * *

Duke University Medical Alumni Luncheon

The Duke Medical Alumni Luncheon during the meeting of the North Carolina Medical Society will be held Tuesday, May 7 at 1:00 p.m., at the George Vanderbilt Hotel in Asheville.

Those planning to attend should notify the Secretary, Box 3811, Duke Hospital, Durham.

NORTH CAROLINA STATE BOARD OF MEDICAL EXAMINERS

The North Carolina State Board of Medical Examiners has scheduled the following meetings for May and June:

Applicants for license by endorsement will be interviewed on May 5 at the Battery Park Hotel, Asheville, and on June 18 at the Sir Walter Hotel, Raleigh.

A written examination will be given, also at the Sir Walter Hotel, Raleigh, June 17-20.

NORTH CAROLINA SOCIETY FOR CRIPPLED CHILDREN AND ADULTS

Helping handicapped children to speak and hear better and to overcome stuttering and other vocal disabilities is being advanced substantially in three institutions of higher learning in North Carolina through a special program now ten years old, it was announced recently by Albin Pikutis, executive director of the North Carolina Society for Crippled Children and Adults.

The three institutions offering actual assistance in aiding children to improve their hearing and speech, despite defects, are Western Carolina College, North Carolina College at Durham, and East Carolina College.

Mr. Pikutis disclosed ten years of valued work in helping children in summer education workshops. The workshops will be continued this summer, the eleventh annual program of such assistance.

In ten years approximately \$30,000 has been contributed by the Society for Crippled Children to train teachers capable of directing public school programs for the handicapped, for summer education workshops, and for scholarships to teachers requiring financial assistance.

This past year \$2,000 was donated by the Society for Crippled Children and Adults for the workshops alone.

Courses offered at the institutions include: arts

and crafts, speech pathology, speech correction, reading clinics, clinical practice with mentally retarded and speech-handicapped children. For example, at East Carolina the total of 17 children enrolled ranged in age from 5 to 12 years of age and their ailments included four cleft palates, two mentally retarded, two stutterers, one tongue-tied, three brain injuries, and four with lesser articulatory problems.

At Western Carolina 319 children were enrolled in a campus laboratory school, with four full-time teachers helping.

The funds and the guidance of the programs is made possible through Easter Seal Sale dollars.

NORTH CAROLINA TRUDEAU SOCIETY

The North Carolina Trudeau Society will hold its annual meeting at the Battery Park Hotel in Asheville on Monday, April 8. The following program has been arranged:

Afternoon Session: 2:30 p.m.-5:00 p.m.

Chairman—B. E. Morgan, M.D., Vice President
North Carolina Trudeau Society, Wilson

"Viral and Rickettsial Infections Involving the Lower Respiratory Tract"—Thomas W. Simpson, M.D., Winston-Salem.

"Case Finding Through Chest X-ray Surveys"—William A. Smith, M.D., Raleigh.

"Asymptomatic Pulmonary Nodules and Unresolved Pneumonia"—Harry E. Walkup, M.D., Oteen.

"The Use of Steroid Hormones in the Treatment of Active Tuberculosis"—Willard C. Hewitt, M.D., McCain.

Dinner Meeting: 7:00 p.m.

Chairman—C. Hege Kapp, M.D., President
North Carolina Trudeau Society, Winston-Salem
"Renal Tuberculosis"—John K. Lattimer, M.D., Director Research Center, Genito-urinary Tuberculosis, VA Hospital, Bronx, New York.

EDGECOMBE-NASH MEDICAL SOCIETY

The monthly meeting of the Edgcombe-Nash County Medical Society was held on February 13, at the Benvenue Country Club.

Dr. J. C. Brantley, Jr., program chairman for February, presented Dr. Roy T. Parker of the Department of Obstetrics and Gynecology of the Duke University School of Medicine, who spoke on the "Diagnosis and Management of Ovarian Carcinoma."

FORSYTH COUNTY MEDICAL SOCIETY

"Taxes and Related Matters" was the subject of a panel discussion presented at the February meeting of the Forsyth County Medical Society. R. C. Vaughan, attorney, was moderator, and panel members were Leon L. Rice, Jr. and Winfield Blackwell, attorneys; and R. B. Clodfelter, trust officer of the Wachovia Bank and Trust Company.

SOUTH ATLANTIC ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS

At a meeting of the South Atlantic Association of Obstetricians and Gynecologists held February 6, 7, 8 and 9, at Charleston, South Carolina, the following officers were elected:

President: Dr. Manly E. Hutchinson, Columbia, South Carolina

Vice President: Dr. C. Hampton Mauzy, Winston-Salem

President-Elect: Dr. Charles J. Collins, Orlando, Florida

Secretary-Treasurer: Dr. W. Norman Thornton, Jr., Charlottesville, Virginia

Assistant Secretary-Treasurer: Dr. Lawrence L. Hester, Jr., Charleston, South Carolina.

The next meeting of the Association is to be held at the Hollywood Beach Hotel, Hollywood, Florida, February 1 to the 5, 1958.

AMERICAN PSYCHIATRIC ASSOCIATION

The American Psychiatric Association today announced the award of 14 Smith, Kline & French Foundation Fellowships in Psychiatry. At the same time, the APA announced that the next review of applications will be held in May. Applications must be received by April 15 by the Fellowship Committee, P.O. Box 7929, Philadelphia, Pennsylvania.

NATIONAL INDUSTRIAL HEALTH CONFERENCE

The Twelfth National Industrial Health Conference will be held at Kiel Auditorium, St. Louis, Missouri, April 20-26. This conference annually brings together the five organizations whose members are responsible for maintaining the health of the nation's industrial workers: the Industrial Medical Association; the American Industrial Hygiene Association; the American Association of Industrial Nurses; the American Conference of Governmental Industrial Hygienists; and the American Association of Industrial Dentists.

HEALTH INSURANCE COUNCIL

An informational program on how mutual efforts by state medical societies and the insurance business can result in better medical service and health insurance protection for the American public was recently held in New York.

Sponsored by a discussion group of the Health Insurance Council, representing eight insurance trade associations whose companies insure over half of the 110 million Americans having some type of health insurance, executive secretaries of eastern medical societies joined insurance executives in discussing ways to further broaden health insurance coverage and keep elevating medical costs within the reach of the average citizen.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

The next scheduled examinations (Part II) oral and clinical for all candidates will be conducted at the Edgewater Beach Hotel, Chicago, Illinois, by the entire Board from May 16 through 25, 1957. Formal notice of the exact time of each candidate's examination will be sent him in advance of the examination dates.

Candidates who participated in the Part I examinations will be notified of their eligibility for the Part II examinations as soon as possible.

JOHNS HOPKINS POSTGRADUATE COURSE

A six-day postgraduate course dealing with Topics in Clinical Medicine will be offered at the Johns Hopkins Hospital, May 13-18, under the sponsorship of the Department of Medicine of the Hospital and the Johns Hopkins University School of Medicine.

This postgraduate course has been planned under the direction of Dr. A. M. Harvey, professor and director of the Department of Medicine, and members of his staff. The discussions will deal with recent and significant advances in areas of general clinical interest. They will all be related to the diagnosis and management of patients and, wherever possible, will be illustrated by clinical demonstrations.

For information write: Dr. Philip A. Tumulty, Department of Medicine, The Johns Hopkins Hospital, Baltimore 5, Maryland.

NEWS NOTES FROM THE AMERICAN MEDICAL ASSOCIATION

A.M.A. Plans Outstanding Medical Meeting in June

Physicians attending the American Medical Association's one hundred sixth annual meeting in New York City June 3-7 will find a star-studded revue of exhibits, scientific lectures, medical films, and color television programs lined up for their pleasure and enlightenment. Approximately 18,000 physicians from all over the country are expected to participate in this world-famous "short-course" in postgraduate medical education. Focal point of scientific program will be the Coliseum—New York's new exhibition hall—with four floors devoted to technical and scientific exhibits, many of the scientific meetings and the color television program. A number of section meetings plus the scientific film program will be held in hotels near the exhibit hall. Headquarters for the House of Delegates will be the Waldorf Astoria.

An outstanding scientific lecture program is being arranged by the Council on Scientific Assembly. Opening the general scientific program on Monday morning, June 3, will be a review of recent progress in surgery, while the afternoon session will deal with recent advances in medicine. Tuesday morning's general meeting will feature

a discussion on the use and abuse of mood-altering drugs in daily practice.

Formal section meetings will run from Tuesday afternoon through Friday morning. Many of the sections will combine to present special symposiums and panel discussions. The Section on Miscellaneous Topics is arranging sessions on allergy, legal medicine, with a mock trial involving the testing of drinking drivers, and methods of improving communication in medicine. A number of exhibit-symposiums and question-and-answer conferences also will be held. Special exhibits on fractures, diabetes, perinatal mortality, pulmonary function testing, fresh tissue pathology, arthritis, and nutrition also will be presented.

The color television program presenting live surgical procedures from Roosevelt Hospital will again be sponsored in cooperation with Smith, Kline & French Laboratories.

Registration officially opens at the Coliseum Monday at 8:30 a.m. and closes Friday noon. Advance registrations will be accepted Sunday from 12 noon to 4:00 p.m. The exhibit hall will be open to "doctors only" on Tuesday and Wednesday mornings to give physicians an opportunity to circulate more freely among the technical and scientific exhibits. For your comfort, the new Coliseum has many facilities, including air conditioning, escalators, elevators, a cafeteria, and snack bars.

Physicians and their wives should plan now to attend this worth-while medical conclave. Further details will be published in the *Journal of the American Medical Association*.

A.M.A. Sponsors First International Film Program

A unique selection of foreign-made medical films will be shown for the first time at the American Medical Association's one hundred sixth annual meeting June 3-7 in New York City. So far, 20 countries have submitted applications to this "international medical film program." Chief purpose of the program is to bring to the attention of doctors attending the convention some of the outstanding motion pictures produced abroad dealing with many aspects of medicine and surgery. A great many foreign physicians have already indicated an interest in the program.

Another aim will be to afford representatives of the United States and foreign countries the opportunity of discussing the possibilities of lifting existing customs barriers which make it practically impossible to exchange such motion pictures.

Two New A.M.A. Exhibits At June Meeting

Two new A.M.A. scientific exhibits designed primarily for physicians will be unveiled at the annual meeting in June in New York City. These displays are being prepared jointly by the Bureau of Exhibits and (1) the Bureau of Health Education and (2) the Council on Foods and Nutrition. Both will be available on a loan basis to medical societies after the annual meeting.

(1) "Health Appraisal of the School Child"—presents five factors involved in a complete appraisal program, including teacher observation, screening procedures, dental and medical examinations, and the follow-through.

(2) "Foods in Oral Electrolyte Therapy"—designed primarily for the general practitioner who is concerned with electrolyte therapy in the non-hospitalized patient. Purpose of the display is to remind physicians that foods are useful in electrolyte replacement. The exhibit is divided into three major categories: (a) common clinical conditions causing deviation from the normal; (b) examples of foods useful for replacement therapy, and (c) advantages of oral administration of these elements.

Health Exhibit Good Drawing Card

The first public showing of A.M.A.'s new health exhibit "We Hear" brought an enthusiastic response from visitors at the Florida State Fair in Tampa, January 29 through February 9. Most popular feature of the exhibit was the "test your hearing" booth which drew some 27,000 participants. Both the "We Hear" and "We See" exhibits were sponsored jointly by the Florida Medical Association and the Hillsborough County Medical Association. Other medical societies interested in showing health exhibits at local fairs should contact the A.M.A.'s Bureau of Exhibits as soon as possible. Many spring and summer bookings have already been arranged.

AMERICAN COLLEGE OF CHEST PHYSICIANS

The twenty-third annual meeting of the American College of Chest Physicians will be held at the Hotel Commodore, New York City, May 29—June 2. The scientific program will include prominent speakers on all aspects of heart and lung diseases. In addition to formal presentations, there will be a number of symposiums, round table luncheon discussions, seminars, and motion pictures.

The Fireside Conferences, which were inaugurated at the annual meeting of the College in 1955, have become more and more popular and will be repeated. At this session, more than 50 experts will be present to lead the discussions on many subjects of current interest in the specialty of diseases of the chest.

Examinations for Fellowship in the College will be held on Thursday, May 30. On Saturday evening, June 1, more than 150 physicians will receive their certificates of Fellowship at the annual convocation, which will precede the Presidents' Banquet.

Copies of the program may be obtained by writing to the Executive Offices, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

AMERICAN HEARING SOCIETY

Because it is not a "visible" handicap, the average American is unaware that nearly one in ten of his fellow citizens suffers from some degree of hearing loss. That of these estimated 15 million hard of hearing persons some three million are young children is often not apparent even to parents and families who think their youngster is just "slow to talk" or "not paying attention."

The American Hearing Society, during its Twenty-Ninth Annual National Hearing Week hopes to alert the public to the problems of hearing loss and the importance of efforts to prevent deafness, conserve hearing and failing those, then rehabilitation.

Those wishing to help those facing a lifetime of silence in our sound-filled world, may send their gifts to: The American Hearing Society, 1800 H Street, N.W., Washington 6, D. C.

HOSPITAL EXPANSION FOCUSING ON PREVENTIVE MEDICINE

A long-term expansion program which promises to result in the nation's most completely integrated medical center was projected at a meeting held by the trustees of the building fund of the Lankenau Hospital here.

In a dinner titled, "Lankenau Builds for the Future", the hospital's officials outlined plans for a \$40,000,000 project.

Keystone to the expansion program is Lankenau's philosophy that "the hospital of the future will divide its attention and resources almost equally between treating the sick in its great hospital facilities and preventive medicine and clinical investigation", explained Henry S. McNeil, president of McNeil Laboratories, Inc. Mr. McNeil is chairman of the building fund and a member of the board of trustees of the hospital.

Lankenau is now reportedly the only hospital in the United States with a comprehensive public health education program for preventive medicine.

(Bulletin Board continued on page 139)

CALIFORNIA CAREER OPPORTUNITIES FOR PHYSICIANS AND PSYCHIATRISTS

Employment available as a result of interview *only*.

Wide choice of assignments in State hospitals, outpatient clinics, juvenile and adult correctional facilities and a veterans home.

Annual merit salary increases, five-day, forty-hour week, three week vacation and eleven paid holidays yearly. Sick leave and retirement annuities.

Three salary groups: \$10,860-12,000; \$11,400-12,600; \$12,600-13,800.

Candidates must be United States citizens and in possession of, or eligible for California license.

Write:

Medical Recruitment Unit, Box A.
State Personnel Board
501 Capitol Avenue
Sacramento 14, California.

The Month in Washington

With Congress now well along in its session, the list of health and medical bills totals several hundred. Some are minor—and few persons will be affected regardless of what happens. Others just don't make much sense—and the committees, regardless of politics, can be trusted to let these measures die a peaceful death.

But there are scores of others—all important bills—that have some chance of passage, their prospects ranging from an outside possibility to a strong probability. At this stage they can be regarded as the raw material out of which come the studies, the debates, and the arguments in the months ahead.

One of the major health-medical issues is federal aid to medical, dental and osteopathy schools. On this the administration wants grants for construction and equipment only; some of the Democrats want to include money for operating expenses as well.

In a number of bills introduced, the general subject of problems of the aging probably tops the list. And that is no surprise. For several years welfare workers, housing experts and recreational leaders, as well as physicians, have been looking for ways to help the retirement age population. Recently a special center was set up within the Institutes of Health to devote its time exclusively to the aged. Outside government, voluntary groups have also been at work on the same subject.

Now the ideas developed by the years of discussion are coming to the surface in the form of legislation. Several of the bills would set up commissions, appointed either by the President or Congress. Another recommends that an existing House Committee make a study of the aging, similar to that suggested for the various commissions.

The commissions and committees would have one thing in common: They would further study and investigate in a field that many persons believe already has been plowed and replowed by investigators.

Several lawmakers want to get going right away. They would set up within the Department of Health, Education, and Welfare a new Bureau of Older Persons, which immediately would start out to solve some

of the problems through grants, demonstrations, and more research.

Most controversial of the "help the aged" bills is one originally proposed by the then Social Security Administrator, Oscar Ewing, in 1951. It would allow 60 days a year of government-paid hospitalization every year for persons covered by OASI after they reach age 65. They could have this free service whether or not they were on retirement.

As in most Congresses, those who want to get the veterans more benefits and those who think they are getting too much already are coming to grips over new bills. Important in this group is a measure proposed by Chairman Teague (D., Texas) of the House Veterans Affairs Committee that would tighten up procedures under which veterans with non-service-connected conditions receive hospitalization. But at the same time there is pressure from other quarters for a lengthening of the "presumptive periods" for various diseases. Where the law now states that a certain disease or condition will be considered service-connected if diagnosed within one year after the veteran's discharge, these bills would make the period two or three years.

Many other bills aimed at liberalizing veterans' benefits in various ways also are awaiting committee action.

Social security and taxes are other popular fields for the legislators. As expected, several bills call for lowering the age at which a disabled person can start receiving his social security pension, now set at 50. Many measures would change the income tax laws to allow more credit for medical expenses, and one proposes allowing the taxpayer to deduct premiums for health insurance from his income tax itself.

Of major interest to physicians and most self-employed is the Jenkins-Keogh legislation, which would allow deferment of taxes on a portion of income put into retirement plans.

Again, a number of lawmakers want the federal government to take a more active part in control of narcotics, barbiturates, and amphetamines, and treatment of addicts. One suggestion is to consider any shipment of barbiturates or amphetamines as a part of interstate commerce, on the theory that intrastate control is essential

to interstate control. This and other bills also call for strict record-keeping and registration (physicians excepted from these provisions).

A plan introduced in the last session and offered again would give the President the right to assume control over the production, distribution, and use of any drugs or biologicals "for use in the prevention and treatment of disease."

Other medical bills will of course be introduced as the session moves on; those discussed here already are assured of considerable attention.

BOOK REVIEWS

Internal Secretions of the Pancreas (Ciba Foundation Colloquia on Endocrinology, vol. 9). Edited by G.E.W. Wolstenholme and Cecilia M. O'Connor. 221 pages, with 100 illustrations. Price \$7.00. Boston: Little, Brown and Company, 1956.

This colloquium maintains the high standard established by previous Ciba sponsored symposia. The idea of experts around a table talking shop is an attractive one, particularly when the subject is as pertinent as this. While some might consider the present volume too occult for the average physician, this reviewer believes that any physician at all concerned with diabetic patients would do well to glance at it, if only to catch a glimpse of today's thoughts evolving toward tomorrow's understanding of the endocrine functions of the pancreas.

Seventeen papers are presented, ranging in subject from pancreatic cell activity, through consideration of insulin structure and the role of glucagon, to the influence of the islet cells on growth. Contributors include such outstanding investigators as Young, Best, the Coris, Behrens, Sutherland and de Duve. For those interested in the history of insulin and glucagon research there is an excellent review by Schulze of Leipzig.

While this book will be of interest primarily to biochemists, physiologists, and physicists, at least half of the articles deserve the attention of internists and general practitioners who deal with patients outside the laboratory.

Natural Resistance to Infections. By W. McDermott and others. *Annals of the New York Academy of Sciences*, vol. 66, art. 2. 176 pages. Price, \$3.50. Published by the Academy, 1956.

Most of our knowledge concerning resistance to infections has been based on antigen-antibody reactions. The relative ease with which these reactions could be measured has accounted for the con-

centration of research on this phase of resistance to infection.

Many factors other than the production of antibodies are known to contribute to the total mechanism of resistance to infections, and this series of papers describes some of them. Emphasis now is being placed on the properdin system. In contrast to the antibody response, the properdin titer does not increase following exposure to infection, and it is nonspecific in its bactericidal and viricidal activity. Factors affecting the properdin system activity, such as complement components and magnesium, have been described in detail. Other subjects in this series on natural resistance to infection include irradiation effects, lipopolysaccharide effects, effect of peripheral vascular collapse, nutritional and genetic factors, and biochemical studies on phagocytic cells.

This series of papers serves as an excellent introduction to the new and exciting phase of the host-parasite relationship, the natural resistance to infection.

Staphylococcal Infections. By D. E. Rogers and others. *Annals of the New York Academy of Sciences*, vol. 65, art. 3. 190 pages. Price, \$4.50. Published by the Academy, 1956.

This is a timely monograph that should prove valuable to the practicing physician as well as to those who are conducting research. The difficulties that one encounters when dealing with staphylococcal infections are discussed in detail, and the need for a return to the Listerian techniques of asepsis is emphasized. Since the staphylococci, tubercle bacilli, and enteric organisms may comprise one's normal flora, many of the factors that affect the host-parasite relationship are common for these organisms.

The monograph is divided into three parts under the headings, "Host Factors in Experimental Staphylococcal Infections," "Biological Characteristics of Staphylococci that May Relate to Virulence," "Immunity, Epidemiology, and Antimicrobial Resistance."

The problems involving staphylococcal infections include the high carrier rate of hospital personnel, the increase in carrier rate of the patient following admission to the hospital, the high incidence of antibiotic-resistant staphylococci isolated from hospital personnel and patients, the rise in mortality rate due to postoperative staphylococcal sepsis, the selection of drug of choice, and the necessary control measures.

The dependence on antibiotics as a means of controlling postoperative infection may have been a major contributing factor in many of the problems encountered today, micrococcal enteritis being one of them.

Being aware of the problem is the first step in its solution. This monograph not only describes the problems but it also provides many approaches to their being solved.

Techniques for the Study of Behavioral Effects of Drugs. By Peter B. Drews, and others. *Annals of the New York Academy of Science*, vol. 65, art. 4. 114 pages. Price, \$3.00. Published by the Academy, 1956.

This publication consists of eight papers presented at a recent conference of the N. Y. Academy of Sciences. The influence of the tranquilizing drugs on man and common laboratory animals was considered. Many of the effects noted in man were readily described and evaluated; however, the evaluation of animal behavior proved more difficult. Among the animal responses used as measures of behavior were: sociability, contentment, excitement, and hostility as observed in the cat; the conditioned emotional response in the rat; the pigeon's pecking for grains according to a fixed interval or a fixed ratio schedule. The above methods are incompletely understood and frequently the results obtained are difficult to reconcile with the effects observed in the human, for example, meprobamate (Miltown^R, Equanil^R), chlorpromazine, reserpine, and azacyclonol (Frenquel^R) produced a marked decrease in sociability as observed in the cat. However, the administration of chlorpromazine depressed the conditioned emotional response in the rat and resembled one of the tranquilizing effects observed in man. Other papers in this series deal with the limitations of the current tests of animal behavior and should prove useful to the experimental psychologist or pharmacologist.

The Truth About Cancer. By Charles S. Cameron, M.D. 268 pages. Price, \$4.95. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1956.

This is "The Truth About Cancer" for the layman, or at least as much of the truth as Dr. Cameron sees fit to tell. And he sees fit to tell a great deal. Before embarking on a Cook's pathologic tour of the body, he provides a very good general introduction to the entire topic, ranging from history and statistics, through misconceptions and quackery, to current research. His language is temperate, with none of the fervor often employed by some writers in this field. The same cannot be said for the publisher's foreword and a preface by an ex-president of the American Medical Association. The reader is advised to ignore the book jacket, which sounds like a soap opera commercial, to eschew Mr. Ettinger's and Dr. Hess's comments, which aren't much more circumspect, and to concentrate on Dr. Cameron's solid presentation.

There are reservations about such books, however. Some movies are classified as adult entertainment; this is a book for adults. Hypochondriacs will find a wonderful source of complaints here, which will only serve to confuse themselves and their physicians.

Low-Fat Cookery. By Evelyn S. Stead and Gloria K. Warren. 184 pages. Price, \$3.95. New York: McGraw-Hill Book Company, Inc., 1956.

Low Fat Cookery offers delicious and appetizing menus to patients with heart disease, diabetes, and others who are overweight.

The authors of this cook book have collected and tested over 150 easy recipes for cooking tasty dishes which contain little or no fat.

Recipes for preparing appetizers and hor d'oeuvres, soups, meats, fish, poultry, cheese and cheese spreads, salads and salad dressings, sandwiches, sauces, vegetables, desserts, beverages and breakfast are included. Sample weekly menus as well as a list of foods and their fat content are given.

The introduction of **Low-Fat Cookery** is written by Eugene A. Stead, Jr., M.D., and James V. Warren, M.D., husbands of the authors.

Doctors should be happy to recommend this book to their patients, and patients who are reluctant to follow diets will rejoice to find that they can have pleasant and enjoyable foods which are not detrimental to their health.

BULLETIN BOARD

(Bulletin Board continued from page 136)

NATIONAL SCHOLARSHIP CONTEST

Policies for education totaling \$75,000 will be issued this year to 49 winners of a national scholarship contest conducted by Johnson & Johnson in cooperation with The Mutual Benefit Life Insurance Company.

The \$75,000 will be provided by the Annual Youth Scholarship Fund which was set up by Johnson & Johnson to give greater educational opportunities to students in a field of their own choice.

The contest will award scholarship prizes for the best 50-word essays that complete the statement: "A good education is important because . . ." Top prize will be \$10,000, followed by two second prizes of \$5,000 each, six fourth prizes of \$1,500 each, and thirty-six prizes of \$1,000 each.

The winners will receive from the Mutual Benefit Life Insurance Company contracts that are intended to endow at age 18 with the amount of the prize won. All premiums will be fully prepaid by Johnson & Johnson. In case of death prior to the endowment date, settlement will be made of the approximate amount of the prize money.

The contest opens officially on February 4, 1957, and closes May 4, 1957.

The contest is open to parents and other adults, as well as children. However, only persons under the age of 17 years and one month on May 14, 1957, will be eligible to receive the Mutual Benefit Life policies. Contestants over that age must designate a person of eligible age to receive the

policy which will mature when the recipient reaches age 18. Only one prize will be awarded to a family.

Entry blanks may be obtained not only from dealers, but also in writing from the National Youth Scholarship Committee, 130 East 59th Street, New York 22, N. Y. Entries must be postmarked not later than May 4, 1957, and received by May 14, 1957.

THE WORLD MEDICAL ASSOCIATION

A Central Repository for the medical credentials of doctors of the world has been developed through the joint efforts of the national member associations and the General Secretariat of The World Medical Association. Credentials or authenticated duplicates or copies will be processed jointly by the member associations and the Secretariat of The World Medical Association. Application blanks and identification forms to accompany the credentials for deposit will be available through the national medical association of each country and its component parts.

The credentials deposited in the Central Repository will be safe-guarded by precautions of identification similar to those used in a bank deposit vault. The Repository will be located at a site and in a construction technically and scientifically estimated to provide ultimate protection to vital records in the event of destructive disasters.

Doctors wishing to provide the protection of a Repository for their records should apply to their national medical association for additional information and the necessary forms. Repository service will be financed by an annual charge to each doctor taking advantage of this service. It is currently estimated that the cost will be less than \$5.00 U. S. dollars yearly.

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

The eighth annual Symposium on Recent Advances in the Study of Venereal Diseases will be held in the auditorium of the Department of Health, Education, and Welfare, Washington, D. C., on April 24-25, 1957.

The sessions are open to all interested physicians and workers in allied professions. Hundreds of participants from all parts of the country, including many outstanding authorities on venereal disease, attend annually to exchange the latest available information.

Topics to be discussed will cover many aspects of venereal disease control including basic and clinical research, serology, epidemiology, treatment, program operation, and professional education.

* * *

The United States is joining with other nations in the observance of World Health Day, April 7. Dr. Leroy E. Burney, Surgeon General of the Public Health Service, has announced.

Federal agencies this year will observe the theme, "Food and Health," in programs dealing with nutrition, food production and distribution, and food protection and sanitation, Dr. Burney said. Agencies participating include the Department of Health, Education, and Welfare, the Department of Agriculture, and the Department of State.

* * *

The Food and Drug Administration has published an order denying proposals to permit sale without prescription of ointments and lotions containing hydrocortisone and hydrocortisone acetate. Such products are prescribed for relief of various skin disorders.

According to the Commissioner's statement, the available evidence fails to show that these drugs are unsafe for use without medical supervision. In particular, there is insufficient evidence to show the range in the amount of hydrocortisone that is absorbed through the skin and the clinical significance of such absorption.

* * *

A research training program to increase scientific manpower for clinical and non-clinical cancer research has been established by the National Cancer Institute of the Public Health Service, Department of Health, Education, and Welfare. Funds totaling \$1,200,000 were appropriated for the program by Congress.

VETERANS ADMINISTRATION

The risk of sudden death at surgery has been reduced through the development of a new instrument by scientists and doctors at the Hines, Illinois, Veterans Administration hospital.

Called a "cardiac monitor," the transistorized device permits continuous and instantaneous monitoring of the heartbeat during surgery and for use during non-surgical emergencies. The meter warns the doctor that the heart is not working properly and that remedial steps are indicated.

Standard electrocardiograph electrodes are strapped on the forearms of the patient. These pick up the cardiac impulse and feed it into the machine. This impulse is amplified by the transistor circuit and indicated on a meter.

The monitor has been successfully tested at Hines. It has provided an immediate diagnosis of irregular heart action and may anticipate stoppage of the heart. It has even been able to provide monitoring of the heart rate during profound shock when the patient was clinically pulseless, VA said.

NORTH CAROLINA

Medical Journal



Vol. 18 No. 4
April, 1957

IN THIS ISSUE:

DISSEMINATED LUPUS ERYTHEMATOSUS — ALLGOOD

relief
for your
patients

who develop nasal congestion
on reserpine therapy

SANDRIL \bar{c} PYRONIL

(Reserpine, Lilly)

(Pyrobutamine, Lilly)

Lilly

QUALITY / RESEARCH / INTEGRITY

About 50 percent of all patients
experience this annoying side-effect.
'Sandril' \bar{c} 'Pyronil' relieves 75 percent
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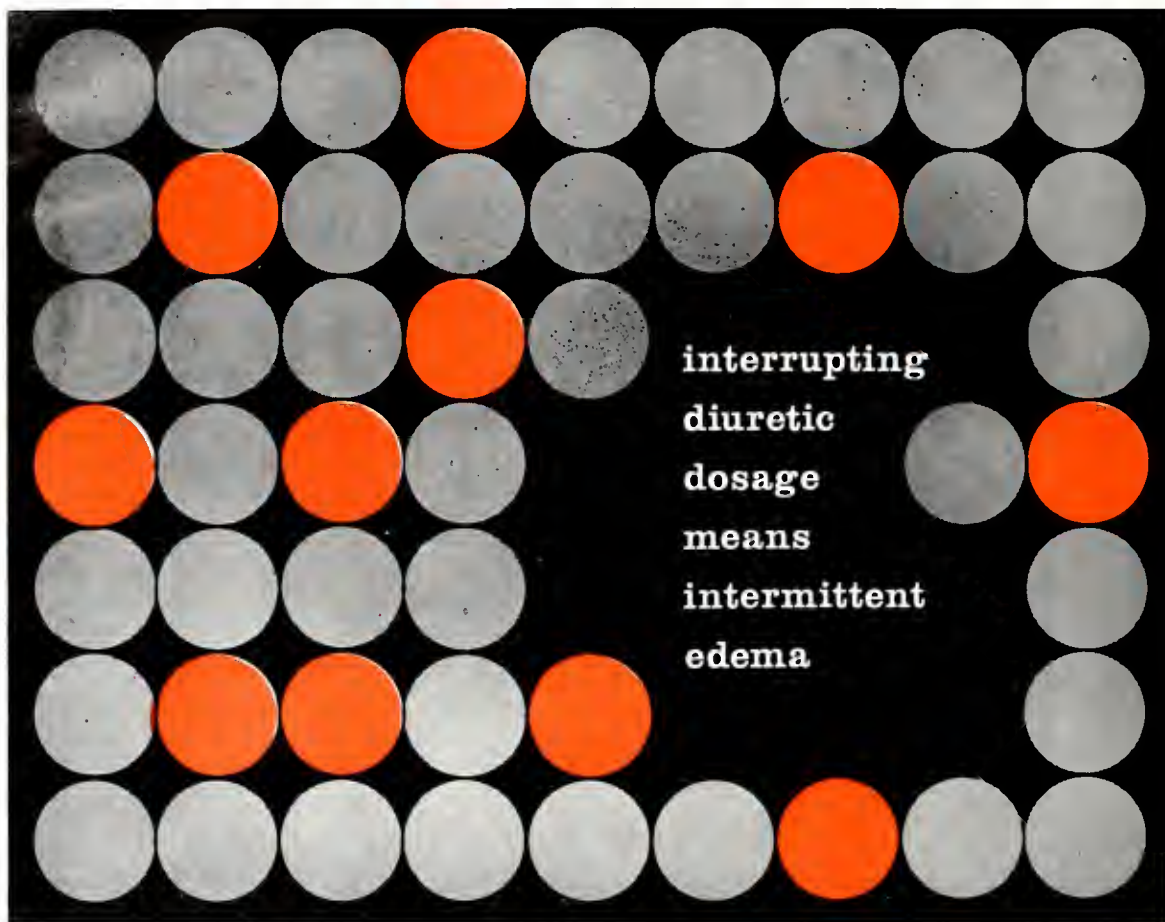
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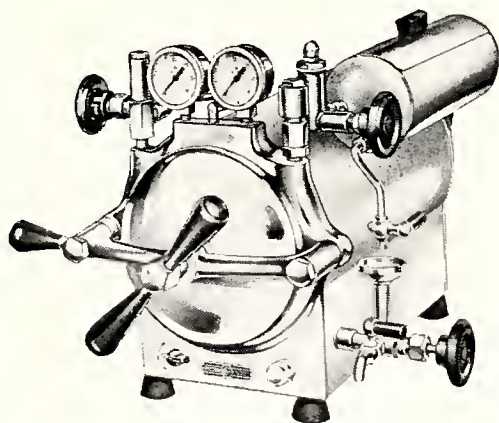
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NORTH CAROLINA MEDICAL JOURNAL

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VOLUME 18

APRIL, 1957

NUMBER 4

Disseminated Lupus Erythematosus: Its Recognition and Present Day Concepts of Its Etiology and Management

JOHN W. ALLGOOD, M.D.

GREENSBORO

When Hargraves⁽¹⁾ first described the lupus erythematosus (L.E.) cell, he started an avalanche of new activity in medical thinking, experimentation, and writing. Until that time the diagnosis of disseminated lupus erythematosus had to be based on the history, clinical course, laboratory tests, and often only on postmortem examination. The discovery of the L.E. cell phenomenon did not, however, diminish the importance of these diagnostic aids in the recognition of a disease of such protean symptomatology and unpredictable clinical progress.

Diagnostic Criteria

It has been stated that there are 10 diagnostic criteria of disseminated lupus erythematosus⁽²⁾, and that the presence of as many as seven in any one case permits a diagnosis of relative certainty⁽³⁾. These criteria are: (1) an erythematous skin rash; (2) the constitutional symptoms of cachexia, fever, and loss of weight; (3) negative blood culture; (4) arthralgia; (5) renal disease; (6) suppression of blood-forming elements, resulting in leukopenia, anemia, and thrombocytopenia; (7) adenopathy; (8) nonbacterial endocarditis; (9) serous membrane effusion — pericardial, pleural, and peritoneal; and (10) a higher incidence in females. As these criteria have been discussed by many writers, this discussion will be limited to the most common findings in the history, physical examination, and laboratory tests. The

relative frequency of these findings have been given by various authors, whose data essentially agree. Fairly representative are those of Jessar, Lamont-Havers, and Ragan⁽³⁾, representing 44 cases of their own and 279 others reported in the literature between 1948 and 1952 (tables 1, 2, and 3).

Weight loss and malaise occurred in all the cases; joint symptoms in 77 per cent:

Table 1
Incidence of Symptoms in Lupus Erythematosus

	Percentage
Weight loss	100
Malaise	100
Joint symptoms	77
Gastrointestinal complaints	31
Abdominal pain	20
Nausea, vomiting, or diarrhea	16
Genitourinary symptoms	13
Raynaud's phenomenon	12
Psychosis	7
Convulsions	8
Hemiplegia	2

Table 2
Physical Signs

	Percentage
Fever	97
Skin rash	76
Ulcerous lesions (mouth)	17
Cardiac manifestations	69
Enlarged heart	25
Murmurs	40
Pericardial effusion	12
Pericarditis	22
Hypertension	14
Pleural effusion	34
Pleural rub	20
Pneumonitis	20
General gland enlargement	34
Hepatomegaly	21
Splenomegaly	22
Peripheral edema	18
Facial edema	10
Eyeground changes	20

Read before the Section on Practice of Medicine, Medical Society of the State of North Carolina, Pinehurst, May 2, 1956.

Table 3
Laboratory Findings

	Percentage
Hemoglobin < 12 Gm.	88
RBC < 4,000,000	68
WBC < 5,000	69
Thrombocytopenia	10
Elevated sediment rate	88
Albumin < 3.5 Gm. per 100 cc.	57
< 3.0 Gm. per 100 cc.	30
Globulin > 3.0 Gm. per 100 cc.	62
Positive cephalin flocculation test	77
Positive hemolytic streptococcal agglutination	19
Positive serologic test for syphilis	35
Albuminuria > 1 plus	64
Blood urea nitrogen > 20 mg. per 100 cc.	16
Electrocardiographic changes	48
Abnormal urinary sediment	60

gastrointestinal complaints in about 36 per cent; genitourinary symptoms and Raynaud's phenomenon in about 20 per cent each, and psychoses, convulsions, and hemiplegia in less than 10 per cent.

Ninety-two of the cases were in females. Fever was present in 97 per cent of the cases; skin rash and cardiac manifestations in about 75 per cent. Cardiac manifestations included enlargement of the heart (25 per cent), murmurs (40 per cent), pericardial effusion (12 per cent), pericarditis without effusion (22 per cent), hypertension (14 per cent), generalized lymphadenopathy (34 per cent), and pleural effusion, pleural rub, pneumonitis, hepatomegaly, splenomegaly, peripheral edema, facial edema, and eyeground changes (about 20 per cent respectively).

Anemia and an increased sedimentation rate were found in about 88 per cent of the cases; leukopenia, decreased serum albumin, increased globulin, positive cephalin flocculation, albuminuria, and abnormal urine sediment in about 70 per cent each. Electrocardiographic changes were found in 48 per cent of the cases; false positive serologic test for syphilis, about 35 per cent; thrombocytopenia, 10 per cent; positive hemolytic streptococcus agglutination, 19 per cent; and elevation of the blood urea nitrogen, 16 per cent.

Within the range of signs, symptoms, and laboratory findings which are common to 90 per cent or more of the cases, one finds loss of weight, malaise, fever, anemia, and an increased sedimentation rate—all occurring in a female patient. If the range is widened to include signs and symptoms occurring in 75 per cent of the cases, one would add joint symptoms, skin rash, car-

diac signs, leukopenia, reversal of the albumin: globulin ratio of blood serum, albuminuria, positive cephalin flocculation determinations, and abnormal urinary sediment.

These symptoms, signs, and laboratory findings often present a convincing diagnostic picture, yet one which lacks a pathognomonic sign or test. The same may be said of the histologic examination of tissue, the results of which are considered by some to be fairly diagnostic, by others as nonspecific, but which are agreed by all to be totally lacking in actual proof.

The L.E. cell indicating the L.E. phenomenon was the first evidence of diagnostic proof.

The Lupus Erythematosus Phenomenon

Figure 1 is a photomicrograph showing a typical L.E. cell. The cell itself is a polymorphonuclear leukocyte, in the cytoplasm of which is a large mass of homogenous basophilic material. This mass has pushed the nucleus of the cell to the periphery and squeezed it into an extremely bizarre shape and arrangement. In the blood plasma in the vicinity of this cell may often be seen rosettes of polymorphonuclear leukocytes surrounding the same type of homogenous basophilic material. The inclusions and the extracellular masses have been shown to contain desoxyribonucleic acid in a depolymerized form⁽⁴⁾, and therefore have been assumed to be of nuclear origin. The blood serum also contains a factor, since this cell is not produced by normal serum but can be produced on normal polymorphonuclear leukocytes by incubation with known L.E. serum⁽⁵⁾. This factor has been shown by Haserick⁽⁶⁾ to be a new protein which is an immunologically distinct component of lupus erythematosus gamma globulin. Thus three factors are necessary to the production of the L.E. phenomenon: (1) a specific factor in the serum or plasma; (2) nuclear material derived from the nuclei of cells and altered somewhat by the influence of the serum or plasma factor; and (3) active phagocytic cells which phagocytize the altered masses of nuclear material, in the process of which its own nucleus is distorted and pushed to the periphery of the cell, resulting in the typical L.E. cell.

It has been shown that intracellularly there are present both desoxyribonucleic

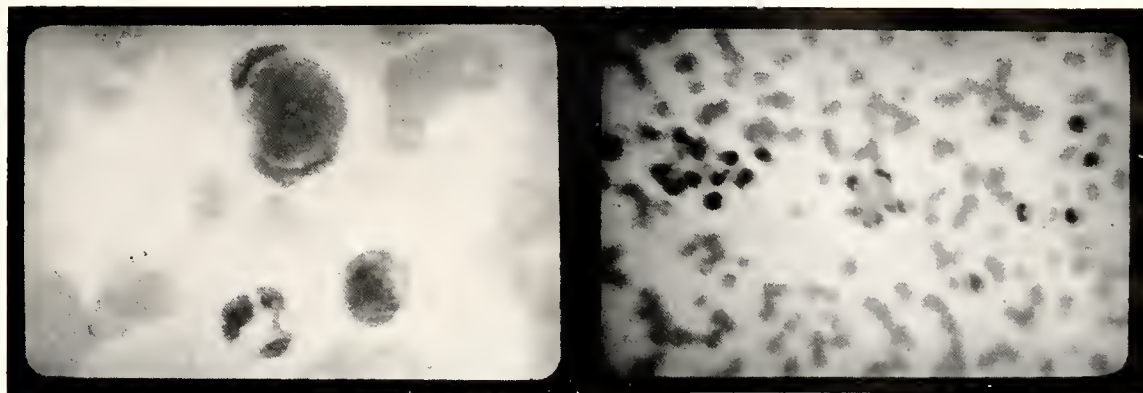


Fig. 1. The L.E. phenomenon. (Published by permission of Dr. H. Z. Lund, pathologist, Cone Memorial Hospital, Greensboro, North Carolina.)

A (left). Photomicrograph showing an L.E. cell in the upper center portion. Note amorphous mass occupying almost the entire cell, dividing and the

nucleus and crowding it into a small space at either pole of the cell.

B (right). Rosette formation. Note the clump of amorphous material in the center of slide, with several phagocytizing polymorphonuclear leukocytes surrounding it.

acid and the enzyme that depolymerizes it — desoxyribonuclease. The desoxyribonuclease is thought to be bound to an inhibitor normally, preventing its acting upon the desoxyribonucleic acid. Indications are that the L.E. factor of the plasma, once having gained entrance into the cell, liberates the desoxyribonuclease from the inhibitor⁽⁷⁾. The enzyme then depolymerizes the desoxyribonucleic acid—the nucleoproteins of the nucleus; the cell disintegrates, and the nuclear fragments or masses are phagocytized by other polymorphonuclear leukocytes, thereby producing the characteristic L.E. cell.

The L.E. cell phenomenon is not found in every case of disseminated lupus erythematosus, a fact that has not been fully explained. When found, however, it is considered pathognomonic of the disease, except in the presence of some condition that would mitigate it. It is true that false positive reactions have been reported in very rare and widely scattered cases of penicillin and Apresoline reactions, amyloidosis, pernicious anemia, miliary tuberculosis, hemolytic anemia, dermatitis herpetiformis, leukemia, candida albicans infection, myeloma, and glomerulonephritis, but some of these conditions, especially penicillin and Apresoline reactions, are known to have many characteristics of connective tissue abnormality resembling lupus erythematosus⁽⁸⁾. In many other of the conditions mentioned the false-positive reaction has been found in only one or two cases, and the reports have not been repeatedly con-

firmed. The comparatively few cases which show a false positive reaction tend to emphasize rather than detract from the specificity of the test.

Twenty hematologists representing all sections of the country were recently polled regarding the specificity of the L.E. test in their own experience⁽⁸⁾. Fifteen of the 20 reported it to be reliable in 95 per cent of the cases; 3, in 90 per cent, and only one reported it as not reliable. One went so far as to say that it was more specific than the Wassermann test. It is not known, however, whether this *in vitro* process is actually an *in vivo* process as well, and therefore of major significance in the pathogenesis of the disease; or whether it is merely an *in vitro* test, showing the presence of a pathologic process, the pathogenesis of which is in no way related to the test that demonstrates it. The weight of present evidence is in favor of the former hypothesis.

Thus the recognition of this very protean disease depends on a clear knowledge of the numerous ramifications of its many clinical manifestations, including the history, physical findings, laboratory tests, and clinical course, aided by the most recent advance in diagnosis—the L.E. phenomenon. This phenomenon, or test, has already made major changes in our study and recognition of the disease, and may eventually be a major factor in elucidating its pathogenesis, treatment, and perhaps even its prevention.

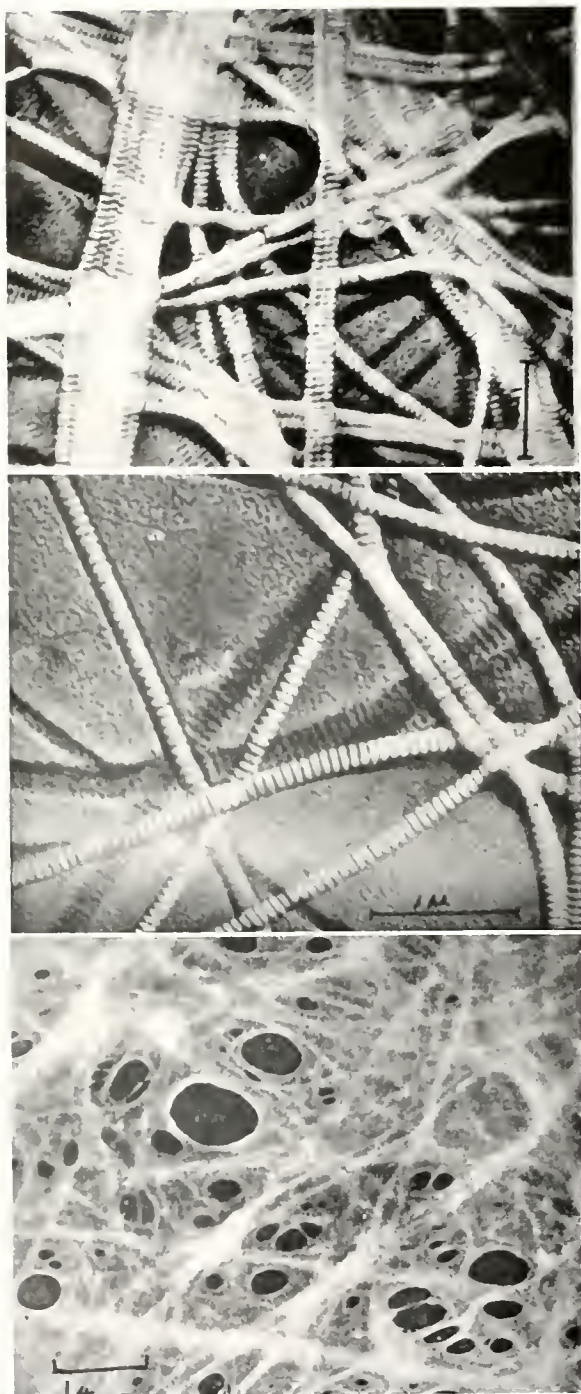


Fig. 2. Connective tissue as viewed through the electron microscope ($\times 30,000$).

A (top). Collagen fibrils, with ground tissue dissolved away. Note beaded appearance with regular intervals between the beads. (Courtesy Gross, J., and Schmidt, F. O.: *Structure of Human Skin Collagen as Studied with the Electron Microscope*, J. Exper. Med. 88:555-568 (Nov.) 1948.

B (center). Higher magnification showing separate fibers, with clear demonstration of beaded composition. (Courtesy, Gross, J., and Schmidt, F. O.: *Structure of Human Skin Collagen as Stud-*

ied with the Electron Microscope, J. Exper. Med. 88:555-568 (Nov.) 1948.)

C (bottom). Fibrils visible through ground substance of connective tissue. Vacuoles and artefact are due to tears in sheets of ground substance. (Courtesy, Gay, T. D., and Eanes, G.: in Rothman, S.: *Physiology and Biochemistry of the Skin*, Chicago, The University of Chicago Press, 1951.

The Structure and Function of Connective Tissue

Since lupus erythematosus has long been considered a disease of connective tissue, a proper prelude to a discussion of present day concepts of pathogenesis and treatment would be a summary of current knowledge and theories concerning the connective tissue itself.

It is well recognized that fibrous connective tissue is composed of three main elements — namely, connective tissue cells, fibers, and a ground substance in which the other two components are embedded. It is derived in the embryonic stage from the embryonic mesenchyme, which, in turn, is derived almost entirely from the mesoderm. The original connective tissue is composed of a network of branching cells called stellate cells, and a homogenous intercellular fluid. From the stellate cells of this original mesenchyme are developed the mast cells, fibroblasts, endothelial cells, and the macrophages of the adult connective tissue. The derivation of the ground substance and the fibrillar components are not as well known, and much disagreement about their origin continues. The cellular elements of adult connective tissue consist of: fibroblasts, whose function it is to produce the fibrillar elements; the macrophages or histiocytes, whose primary function is that of phagocytosis; and mast cells, whose function is to produce heparin and probably to elaborate some of the ground substance. Having mentioned this simple anatomic arrangement and embryology, we have reached the end of anything resembling simplicity. From this point on the subject is most complex and in many cases highly controversial.

Figure 2 shows the other two components of connective tissue — namely, fibrils and ground substance, which are said to be the most markedly affected in lupus erythematosus. The large cords shown here are the collagen fibrils magnified some 30,000 times under the electron microscope. These fibrils are in reality polypeptide chains in parallel array, with the amino acids of the

polypeptides arranged in a highly specific but unknown order. The fibrils have a beaded appearance, with a recognized distance between the beads of 640 Angstrom units. The amino acids composing them are proline, hydroxyproline, hydroxylysine, and glycine. There is little or no sulfur, and an almost complete absence of aromatic amino acids. The minimum molecular weight is 39,000, and the isoelectric point is about 7. When wet it shrinks, and when heated it is converted into gelatin, which is amorphous under the electron microscope, but its amino acid content is the same as before heating. It is not antigenic, not attacked by trypsin, but is rapidly digested by pepsin, especially at a low pH. This refractiveness to trypsin digestion is an important point in working with this substance.

The other material shown in figure 2, occupying the space between the collagen fibrils, is the ground substance. This is the matrix in which the fibrils are held. It is composed of mucopolysaccharide-protein complexes, and is secreted by fibroblasts and/or mast cells from a heparin-like precursor, the secretion being mediated by vitamin C. It may vary from a rigid gel to a more or less fluid state, depending upon the rate of replacement of the glycoprotein and on the degree of depolymerization of the glycoprotein by mucinase enzymes. Hyaluronic acid and three types of chondroitin sulfuric acid compose the major chemical content of this substance. It is digested, or at least altered, by trypsin, and has an isoelectric point of about 4.5.

These two elements, the ground substance and the fibrillar elements, are affected in antagonistic fashion by chemical substances. The fibrillar elements of the collagen in essence make up a regular fabric of protein fibers. The mucopolysaccharides, by possessing macromolecular properties and being a hyaluronidase-sensitive substance, may act as "water-proofing" for the fabric. This arrangement makes for a most effective barrier between blood and parenchyma.

We probably do not know all the functions of connective tissue, but we do know that it provides a framework for the parenchyma, maintains the dynamic state of the framework, repairs the injuries, whether from physical trauma or inflammatory re-

actions following infection, and probably is one source of antibody formation. The effects of cortisone and ACTH on connective tissue is of interest in a discussion of lupus erythematosus. Under the influence of these steroids, fibroplasia is delayed; the incorporation of inorganic sulfate into chondroitin sulfuric acid is inhibited; hydroxyproline is increased in the brain, liver, and heart at the expense of its need in forming collagen; anabolism of connective tissue is decreased; lymphatic tissue activity is decreased, including a decrease in circulating lymphocytes; the invasion of macrocytes into an area of inflammation is inhibited; circulating antibody is decreased; concentration of antibodies in fixed tissue is decreased, especially with larger doses; the development of arterial and glomerular lesions as a result of foreign protein injections is inhibited despite the production of antibodies; the increase in capillary permeability produced by leukotaxine is inhibited; margination of leukocytes as a part of diapedesis in inflammatory reactions is diminished, and the spread factor induced by hyaluronidase is inhibited.

This rather academic discussion of connective tissue indicates in a small way the voluminous amount of work being done on this tissue from the standpoint of physiology, chemistry, morphology, and biochemistry. It has been gleaned from various authors⁽⁹⁾, each of whom in turn has gathered material from numerous experimenters.

Alterations of Connective Tissue in Lupus Erythematosus

Now let us turn our attention to alterations of connective tissue in lupus erythematosus. Contrary to an opinion often expressed or implied, the collagen fibrils in this disease are normal⁽¹⁰⁾, although the fibers may be stuck together abnormally because of fibrin deposits and pathologic changes in the ground substance. When examined under the electron microscope, the fibers present their normal beaded appearance, with the correct length of 640 Angstrom units between the beads.

It is an entirely different story with the ground substance. There is a rather striking swelling^(9c,11), together with a mucoid degeneration which depends on an increase or change in the mucopolysaccharides, followed by necrosis^(9c). This necrosis is the

process so frequently referred to as "fibrinoid change," and is thought to represent a combination of the mucopolysaccharides of the ground substance with an abnormal protein, derived either from the blood or from local tissue damage. The quantity of metachromatic material in the ground substance is greatly increased, and there is some evidence that the heparin, or heparin-like substance, is likewise increased.

The effects of cortisone and ACTH in lupus erythematosus are interesting. The fever drops almost immediately, appetite increases, leukopenia is corrected, malaise is abolished, skin lesions disappear in the course of a few weeks, and the swelling of the ground substance subsides⁽¹¹⁾. Yet life expectancy is not improved, the L.E. phenomenon persists⁽¹²⁾, and hypertension, renal abnormality, hepatomegaly, and splenomegaly respond very poorly or not at all⁽¹²⁾. It would seem, therefore, that we will have to look elsewhere than to the connective tissue for the pathogenesis of the disease. Since the serum proteins remain somewhat altered even under steroid treatment⁽¹³⁾, since the serum proteins furnish almost all the chemical building blocks for the ground substance, and since the L.E. factor has been proved to be an immunologically new protein of the gamma fraction of the serum proteins, it would seem logical to suggest that the serum proteins may be very intimately associated with the pathogenesis of lupus erythematosus. The work of Silver and Kuna⁽¹⁴⁾ lends weight to this suggestion by showing that the proteolytic enzyme, trypsin, which is known to digest ground substance of connective tissue, will stimulate the L.E. phenomenon when added to normal blood.

Treatment

The symptomatic treatment of lupus erythematosus must be remembered, but will not be dwelt on at this time. Transfusions for severe anemia, bed rest for fever and malaise, proper nursing care, careful observation for complications and spread of the clinical manifestations of the condition, and proper electrolyte supervision, as well as other aspects of good general care, are all taken for granted. In addition, the chief means of treatment—ACTH and cortisone—have already been touched on and will not be repeated. The suggested dosage is usually 100 mg. of ACTH given intra-

muscularly in four divided doses daily, or 20 to 40 mg. in 5 per cent dextrose given intravenously over an eight-hour period. The daily dosage of cortisone, given orally, ranges from 200-400 mg. to 600-800 mg., in divided doses. Maintenance doses range from 25 to 75 mg. daily for ACTH, and 50 to 100 mg. daily for cortisone, either divided or in a single dose. More recently, Steinberg and others⁽¹⁵⁾ have reported treatment of 6 patients with metacortandracin (Meticorten), and show results much superior to those obtained with the other steroids, without the unpleasant side-effects of sodium retention, potassium depletion, disturbance in protein and carbohydrate metabolism, hirsutism, moonface, and gastric disturbances so frequently encountered in steroid therapy. The initial daily dose was 30 mg. given in three doses at eight-hour intervals. The dose was gradually decreased to a maintenance dose of 15 to 20 mg. daily.

The only other drugs worth noting are the antimalarial drugs. Penicillin, nitrogen mustard, estradiol, progesterone, testosterone, the sulfonamides, tetracycline, gold, chloramphenicol, and splenectomy comprise only a partial list of treatments which have been tried without benefit. The antimalarial drugs have been used most extensively by the dermatologist, and consequently have been used more in the discoid type of disease than the systemic, disseminated types. Since there is considerable evidence to suggest that the two diseases represent only varying degrees of involvement, it might be worth while to recount the use of antimalarial agents in lupus generally. Dubois⁽¹⁶⁾, using a daily dosage of 300 mg. of quinacrine (Atabrine) initially and gradually increasing it to tolerance or clinical benefit, obtained complete remission in all 6 of his patients with the discoid type of the disease, and definite improvement in 6 of 16 having the systemic type. It was impossible to obtain a plasma level of more than 0.096 mg. per 100 cc., 1/100 the level found necessary in *in vitro* tests to inhibit the L.E. phenomenon⁽¹⁶⁾. However, it has been shown that the concentration of quinacrine in the red cells is from 100 to 300 times that of the plasma⁽¹⁷⁾. He suggests that the beneficial effect of quinacrine seems to be a direct action on the altered enzymatic processes of cellular metabolism.

More recently Luper and Allende⁽¹⁸⁾ have reported the comparatively beneficial effects of quinacrine, chloroquine, and amodiaquin, concluding that both chloroquine and amodiaquin are superior to quinacrine. Dubois⁽¹⁴⁾ obtained his best results from antimalarial drugs and steroid therapy combined. He pointed out that one advantage of having some therapeutic measure other than the steroids is that of having another drug to use during the periods of forced omission of steroids to prevent adrenal atrophy or undesirable hyperplasia.

Summary

The recognition of lupus erythematosus has in recent years been aided by one major advance—recognition of the L.E. cell, indicating the presence of the L.E. factor. The present day concepts of the pathogenesis of this disease are as elusive as ever, but they have to do with the enzymatic processes of cells and intercellular tissue, the serum protein abnormalities, and the chemistry and physiology of connective tissue. The present day treatment has two additions to its armamentarium in the form of steroid and antimalarial therapy.

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In the diagnosis of hyperthyroidism, there is no substitute for careful clinical observation and, in the typical case, multiple laboratory aids are superfluous. Occasionally, when the clinical picture is obscure and atypical, one or more of the available tests of thyroid function may help to clarify or substantiate the clinical impression. It has been clearly emphasized that no one laboratory procedure is infallible and each because of inherent inaccuracies must be interpreted individually in the light of all available clinical data. Maximum usefulness of any thyroid function test will not be forthcoming until all sources of error and reasons for equivocal results are intelligently considered.—Bauer, R. E.: The Present Status of the Diagnosis of Hyperthyroidism, Editorial, Ann. Int. Med. 44:214 (Jan.) 1956.

Intrapulmonary Pleural Effusion

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DURHAM

Intrapulmonary pleural effusion is a collection of free fluid in that portion of the pleural cavity which lies between the inferior surface of the lung and the superior surface of the diaphragm. The fluid may collect in unusual configurations. Interlobar collections, mediastinal gutter collections, and loculated collections are all now rather well known to the radiologist. Although the first paper on this subject was published in 1931 by Rigler⁽¹⁾, intrapulmonary collections are not so well known to the medical world.

It is well accepted that fluid may be present in the pleural cavity without producing signs demonstrable by physical examination or on conventional chest x-ray projections. It has been said that as much as 500 cc. of fluid may be present in the pleural cavity without manifesting any definite signs. Greater quantities than this have been injected experimentally into the pleural spaces of a cadaver without producing the typical pattern of pleural effusion.

Review of the Literature

The history of this radiologic entity is somewhat as follows. In 1931, Rigler⁽¹⁾ published a paper in which he demonstrated small quantities of pleural effusion not visible on routine chest x-ray projections. At this time he presented 5 cases in which he demonstrated this pleural effusion by means of a new x-ray position, the lateral decubitus position, using a horizontal x-ray beam. In 1935, Korol and Scott⁽²⁾ reported a similar entity in 1 case and presented the theory that this unusual configuration of fluid was due to hydropneumothorax with a hidden air bubble.

In 1936, Rigler⁽³⁾ described 3 additional cases in patients with liponephrosis. He did not agree with the theories of Korol and Scott, and postulated that such a distribution in association with liponephrosis may have been caused by the decreased surface tension of the fluid. It is doubtful that surface tension is a major factor, since this

distribution has been produced by cardiac decompensation, the nephrotic stage of nephritis, hemothorax, tuberculosis, and metastatic carcinomatosis. From 1936 to 1950 several isolated cases of hidden effusions were reported. In 1950 Rothstein and Landis⁽⁴⁾ collected a series of 12 cases from a midwestern Veterans Administration Hospital. In the same year they reported a single case of intrapulmonary effusion⁽⁵⁾. In 1951 Hessen⁽⁶⁾ published a monograph in which he described several cases, and in 1954 Friedman⁽⁷⁾ reported a series of 17 cases. In 1955 Wilson⁽¹⁰⁾ reported 24 cases obtained from the index file of his hospital in an eight-month period.

Incidence

As to the actual incidence of this type of effusion, no truly accurate figures can be presented. However, in a one-year period—February 1953 to February 1954—in a general hospital of 150 beds, I was able to collect 7 examples of it⁽⁹⁾. In this same period, 45 patients with typical signs of pleural effusion were seen. Realizing that this is a small series, one can expect approximately 13 per cent of pleural effusions to be intrapulmonary in location.

Etiology

I have no proof of why fluid collects in such positions. I would, however, like to present an unusual but not entirely original hypothesis concerning this phenomenon—namely that all free pleural effusions, at some time early in their progression, assume this distribution. Hessen, Friedman and Wilson have suggested this possibility, which I, too, accept. As fluid forms on the pleural surfaces it tends to collect in the lateral and posterior costophrenic sulci under the influence of gravity. It is now in a portion of the chest cavity which is indirect communication with, and adjacent to, the intrapulmonary space. The intrapulmonary space is also that portion of the chest cavity which conceivably could exert the greatest capillarity effect and would reflect the greatest changes in intrathoracic pressure. The diaphragm has greater motion and exerts greater force during in-

Read before the North Carolina Radiological Society, Asheville, September 8, 1956.

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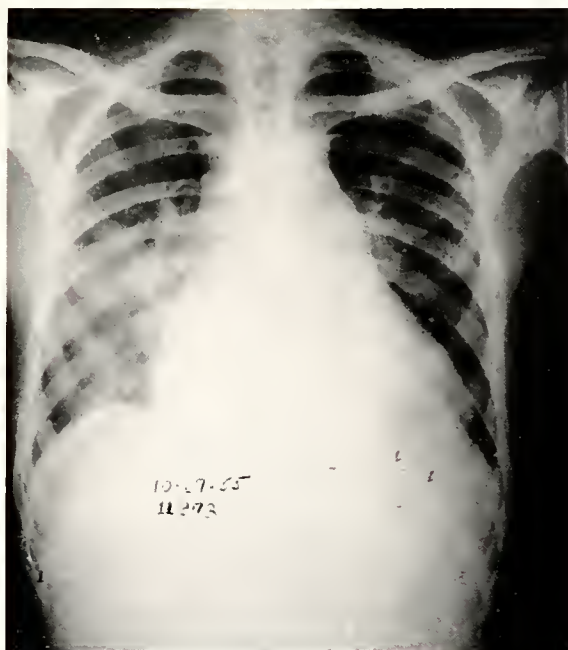


Fig. 1 (Case 1). The arrows delineate the fundus of stomach, showing the degree of separation. Note the clear lateral costophrenic sulcus.



Fig. 2 (Case 1). Right lateral upright view of chest. Note again the separation of gastric bubble and apparent diaphragm and the clear posterior sulcus.

spiration than does the chest wall. The retractility of the lung would tend to prevent expansion as rapid as diaphragmatic motion requires. Also, the effect of retractility is greater in those portions furthest from the hilum, so that the negative intrathoracic pressure in this space should be greater during inspiration. It is therefore conceivable that small amounts of effusion are pulled from the costophrenic sulci during inspiration. This can be demonstrated in some patients with intrapulmonary effusion by watching them during fluoroscopy or by taking films during inspiration, expiration, and the Valsalva maneuver. With a change to a positive intrathoracic pressure, the fluid may assume a typical distribution. When enough fluid forms, however, its mass and volume will overcome the influence of the factors which I have described and the influence of lung displacement will then come into effect, leading to the rather typical configuration accepted with pleural effusion.

Roentgen Diagnosis

Methods of demonstration

Intrapulmonary collections of fluid have been demonstrated by the following methods:

1. With the patient in a recumbent position,

fluid will spread along the posterior wall of the chest, producing a generalized grayness and haziness in that hemithorax. This sign is well accepted in pediatric radiology, as most chest films are taken in this position.

2. Pneumoperitoneum will show separation of the inferior surface of the diaphragm and the lung by fluid. This can be demonstrated more easily on the left side by distending the fundus of the stomach with carbonated beverages.
3. The Valsalva maneuver or expiration radiography will frequently cause this type of effusion to assume a typical configuration.
4. Pulsations, transmitted by the heart beat, have been described on the upper surface of the fluid as a fluoroscopic and kymographic manifestation.
5. The lateral decubitus position, with the affected side down, will cause free fluid to collect along the dependent lateral wall of the chest. An x-ray film exposed with the patient in this position, using a horizontal x-ray beam, has proved to be a very simple and reliable technique.

Signs

The final and most important point in this paper is to point out some of the signs



Fig. 3 (Case 1). Left lateral decubitus position using horizontal x-ray beam. Note the fluid level along the dependent chest wall.

by which radiologists can find these collections of fluid in routine chest roentgenograms. There are some signs identifiable in chest x-ray projections which may give a clue to the presence of this entity.

1. Abnormal elevation of either side of the diaphragm. Although there are other causes for diaphragmatic elevation, a lateral decubitus film or some other method will quickly clarify the problem.
2. Separation of the gastric bubble and what appears to be the diaphragm.

3. Shape of the diaphragm. Hessen⁽⁶⁾, in his monograph, showed these changes diagrammatically. Roughly, if the highest portion of the diaphragm tends to be in the lateral third of the chest cavity, with a tendency towards a flattened mesial section, there is a good possibility that fluid is present.

Figures 1 to 6 illustrate proven cases of pleural effusion which I believe demonstrate an intrapulmonary collection.

Figure 1 is an upright postero-anterior roentgenogram taken on October 27, 1955. This patient is a 31 year old white man who was admitted to this hospital with symptoms of sodium deficiency. He was known to have had mitral disease, and had had a commissurotomy in the past. On admission to this hospital his main complaints were of urinary origin (hesitancy and dysuria), headaches, and some precordial pain. He had no shortness of breath or peripheral edema. The roentgenogram shows separation of the gastric bubble and the apparent upper border of the diaphragm. The gastric bubble is outlined on the photographs by small arrows. Figure 2 is a right lateral upright chest roentgenogram of this patient, showing that the collection of fluid assumes the shape of the diaphragm and causes no blunting of the posterior costophrenic sinus. Figure 3 is a left lateral decubitus projection showing a homogenous



Fig. 4 (Case 2). Note what appears to be marked elevation of the left side of the diaphragm. There is marked separation of fundus and this shadow.

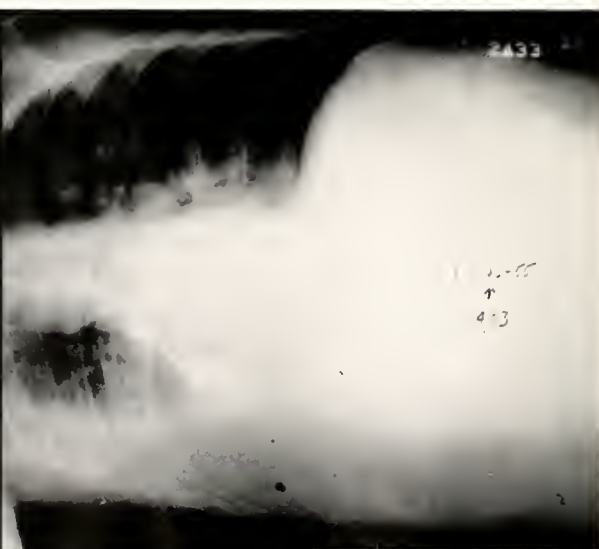


Fig. 5 (Case 2). Left lateral decubitus position. Note the large fluid level along the dependent chest wall.

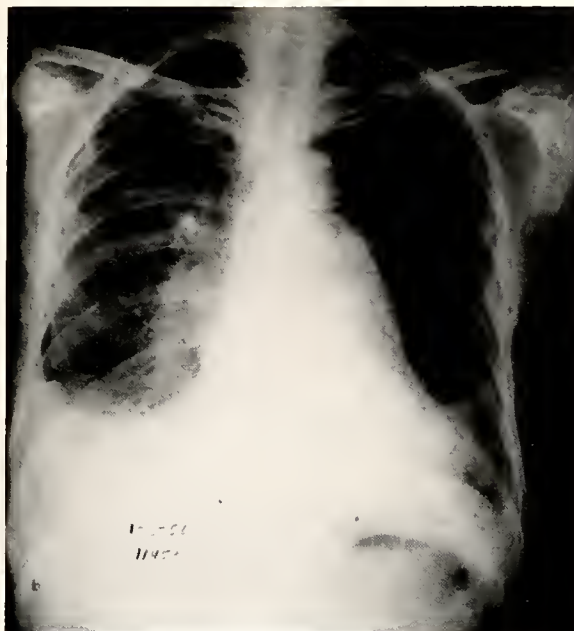


Fig. 6 (Case 2). There is rather obvious evidence of fluid in the right hemithorax, with small loculated hydropneumothorax. Note also separation of the fundus of the stomach and apparent diaphragm.

density along the left lateral margin of the chest (the dependent chest wall). A few days after these roentgenograms were taken, a thoracentesis was performed and several hundred cubic centimeters of sero-sanguineous but non-clotted fluid was removed from the left side of the chest cavity.

Figure 4 is an upright PA x-ray projection taken on December 20, 1955. The patient was a young white man who was known to have glomerulonephritis. He was admitted to this hospital on this occasion with major complaints of peripheral edema. He did have some shortness of breath. This roentgenogram indicates considerable separation of the upper surface of what appears to be the diaphragm and the gastric bubble. Figure 5 is a left lateral decubitus x-ray projection of the same patient, showing the large amount of fluid along the left lateral portion of the chest wall.

Figure 6 is an upright PA chest roentgenogram taken on January 6, 1956. The patient, a 62 year old white man, was admitted to this hospital with complaints of shortness of breath and ankle edema. He also had had some substernal pressure on effort and symptoms of intermittent failure. He was found on admission to have definite evidence of rheumatic heart dis-



Fig. 7 (Case 3). Left lateral decubitus position. Note the fluid level visible in chest cavity on the left.

ease, with auricular fibrillation and calcific mitral stenosis. The x-ray projection shows what is a fairly typical collection of effusion in the right portion of the chest cavity. A small loculated hydropneumothorax from a previous thoracentesis can also be seen. On the left side the superior surface of the diaphragm appears to be smooth and the costophrenic sinus is clear. It can be noted however, that there is a space between the gastric bubble and the upper surface of what appears to be diaphragm.

Figure 7 is a left lateral decubitus x-ray projection of the chest showing a homogeneous collection of fluid along the lower lateral part of the chest wall. Although a portion of the bony thorax has been obscured on photography, the fluid level can definitely be visualized along this margin. This patient had multiple thoracenteses on both sides of his chest during his hospital admission, proving the presence of a bilateral pleural effusion.

Summary

I have pointed out some of the signs by which intrapulmonary pleural effusion may be suspected, some of the properties by which it may be demonstrated, and its possible incidence. The concept that all pleural effusions may start in such a manner has been presented.

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Lipid Studies in Pterygia, Keratitis and Cataracts

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WINSTON-SALEM

This study was conducted in an attempt to correlate certain eye findings with the lipid content of blood serum.

The following conditions are omitted from this study: diabetes mellitus, thyroid gland disease, primary (essential) hyperlipemia, glomerulonephritis, nephrosis, cachexia, hepatic disease, obstructive jaundice, anemia, pregnancy, Nieman Pick Disease, Von Gierke's Disease, immunization, and others that may elevate the lipids.

The following table shows the criteria⁽¹⁾ used to mark the dividing line between normal and abnormal values.

Table 1
Current Lipid Standards

Lipid Constituent	Mg./100 ml.
Cholesterol	
Total cholesterol	260
Cholesterol ester	193
(Ratio = $73\% \pm 1.4\%$)	
Phospholipids	250
Total lipids	820

The determinations were made on fasting blood, with serum that was free of blood cells, without moisture, using the modifications of Bloor's method, which is used at all Winston-Salem⁽²⁾ hospitals.

In 1954, Forsuis⁽³⁾ found that the ratio of cholesterol and phospholipids was slightly more elevated in persons with arcus senilis than in those without. Whereas in younger persons arcus is associated with extensive

lipochemical alterations in the blood, this is not the case in elderly persons⁽⁴⁾.

Primary lipid dystrophy of the cornea⁽⁵⁾, marginal dystrophy, and dysostosis multiplex are quite rare, and were not observed during this two-year study. Francois⁽⁶⁾, however, has reported observations of cholesterol crystals on the steep side of marginal dystrophy. Hogan and Cordes⁽⁷⁾ reported histologic changes in the cytoplasm of corneal corpuscles, which did not take the usual fat stains, but were removed by fat solvents. Whereas Gasteiger and Liebenam⁽⁸⁾ had found lipid granules, Cavara⁽⁹⁾ found cholesterol and cholesterol esters in fatty corneal deposits.

Heath⁽¹⁰⁾ reported deep interstitial fat and cellular infiltration of the cornea (usually vascular) and foreign body reaction in (1) parenchymatous keratitis, (2) keratitis centralis annularis, (3) keratitis profunda and (4) xanthomatosis of cornea.

Dunphy⁽¹¹⁾ postulates that whether the fat is brought into the cornea by blood or synthesized by the cell, there must be a primary defect of cellular metabolism or some disturbance of limbal circulation. Therefore the following factors can cause lipids to be deposited into the cornea.

1. Interference with oxidation
2. Intracellular enzyme disturbance
 - Trauma
 - Infection (herpes, *Staphylococcus aureus*)
 - High fat intake
 - Mustard gas
 - Urethane

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From City Memorial Hospital, Winston-Salem.

Table 2
Correlation of Lipid Values with Diseases
of the Eye

Diagnosis	No. Patients	No. Patients with Cholesterol values over 260 mg/ 100 ml.	No. Patients with Cholesterol ester values over 195 mg./ 100 ml.
Cataracts	500	154	26
Pterygia	50	10	5
Xanthelasma	12	1	1
Acute keratitis, etiology unknown; patients hospitalized 5		1	

Systemic fat disease (Tay Sach's disease, Gaucher's disease, etc.)

Lipid studies have been done on various corneal dystrophies by Stocker⁽¹²⁾, Stocker and Holt⁽¹³⁾, Holt⁽¹⁴⁾.

Review of Cases

Pterygia

With this background of factors in lipid infiltration of the cornea, 50 patients who had been operated on for pterygia were studied. In 10 of these, the cholesterol values were more than 260 mg. per 100 ml., and in 5, cholesterol esters were more than 195 mg. per 100 ml. One patient showed a cholesterol value of 463 mg. per 100 ml. and cholesterol ester of 258 elevation.

Primary keratitis

To form a base line on acute primary keratitis of unknown etiology 5 hospitalized patients were studied. Only 1, a 49 year old white man, showed a cholesterol value of 283 mg. per 100 ml., and cholesterol ester of 150 mg. per 100 ml. Beta lipoproteins were normal in 1 patient.

Xanthelasma

In xanthelasma, the lipid phosphorus is known to be high, and the ratio of cholesterol to cholesterol ester is normal^(1,2a). It is also known that dietary restriction of lipids does not affect this condition. Ten hospitalized patients who had been operated on for xanthelasma were studied. A 36 year old white married woman showed a cholesterol value of 276 mg. per 100 ml., and a 62 year old white woman a cholesterol ester of 217 mg. per 100 ml. None showed elevations of both constituents.

Cataract

In 500 consecutive cases of cataract, excluding patients with diabetes mellitus, pregnancy, thyroid disease, and other con-

ditions causing an increase in the lipid content of the blood, 154 patients showed an elevation of cholesterol of more than 260 mg. per 100 ml.

Fifty-five patients showed an elevation of cholesterol esters of more than 195 mg. per 100 ml. Thirty-seven of these showed an increase in the ratio of cholesterol ester to total cholesterol of more than 74 per cent. Twenty-six showed an elevation in both the cholesterol and cholesterol esters. In 10 hospitalized patients with cataracts and elevated cholesterol values, the phospholipid content was determined. One had a phospholipid elevation of 281 mg. per 100 ml., a cholesterol of 387, and total lipids of 1,514. Seven showed a total lipid increase of more than 820 mg. per 100 ml.

Conclusion

The basic lipid content of normal eyes is known⁽¹⁵⁾. Therefore, determinations in cases of cataractous lenses, secondarily infiltrated corneas, and pterygia are being determined and should be determined by other investigators.

Dr. Donald S. Morris, Director of Clinical Chemistry Laboratory at City Memorial Hospital, Winston-Salem, gave valuable technical assistance.

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Occupational Health Pays Dividends

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PISGAH FOREST

The dividends of occupational health are difficult to define in tangible terms or measurable units. Even though there may be considerable agreement on such matters as a healthy body weight, a healthy hemoglobin level, and the like, a definition of the word "health" is very elusive unless we resort to generalities.

Any comprehensive definition of health must include such intangible phenomena as zest for one's work, adjustment in one's way of life, and reasonable effectiveness in a chosen field of productive activity. Admitting that health is an elusive phenomenon to define, we may agree with the idea that by far the more important dividends of health or of any health program are, to a large extent, intangible. The ability to enjoy life to the fullest is an abstract human capacity. Certainly abundant health is necessary if one is to enjoy life to the fullest, yet there are no units or yardsticks which will enable a trained observer to assign a value to this capacity directly.

Regardless of the difficulty of defining health, persistent and careful observation may enable one to recognize both the quality and quantity of certain health dividends and benefits, and lucid ideas and descriptions may develop as a result. As this point of view is applied to occupational health, these values and descriptions are not yet available, but some progress of a tangible sort is possible in evaluating certain aspects of the industrial health program which is later to be described.

Features of an Industrial Health Program

The basic features of a fairly typical in-

dustrial health program include the following:

- A. Physical examinations:
 1. Pre-placement physical examinations
 2. Periodic physical examinations
 3. Special examinations for workers exposed to increased hazards
 4. Back-to-work examinations after illness
- B. Therapeutic services for:
 1. Industrially induced illnesses and accidents
 2. Personal illnesses and accidents
- C. Health education
- D. Industrial hygiene
- E. Medical records
- F. Special clinics:
 1. Follow-up clinic for workers with known or suspected chronic diseases
 2. Gynecologic examining clinic
 3. Clinical psychologic clinic
 4. Foot health clinic
 5. Miscellaneous

In carrying out the program described, the promotion of health should be emphasized at all times. A health-centered program, effectively and aggressively carried out, eventually should be manifested in recognizable benefits.

Health Dividends

In the following discussion an attempt will be made to identify certain manifestations of health achievement and health dividends. These dividends may at times appear oblique rather than specific with reference to health or to the health program, and in many places where progress apparently has been achieved, the role of the industrial medicine department cannot be given exclusive credit. Quite often, improved health is the result of many de-

Read at the Fourth Annual Seminar on Occupational Health, Chapel Hill, February 21, 1957.

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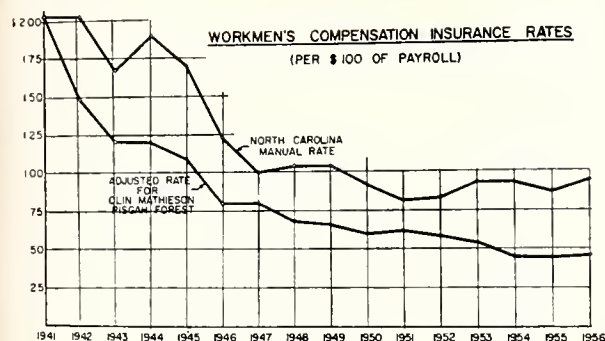


Figure 1

sirable environmental and community factors grouped under the heading of an elevated standard of living. For example, a comfortable wage scale is closely related to the nutritional status of the industrial worker and his family; and without a reasonable living wage, a health program can be greatly handicapped.

Workmen's compensation insurance rates

One significant health dividend is represented in figure 1.

Workmen's compensation insurance premiums in industry are based on the hazards of the job and the accident experience of various industries. To a large extent, the question boils down to a cost-plus basis. The greater the number of compensable accidents, the greater the premium rates. Premiums reflect the accident record. From 1941 through 1956 a curve is shown reflecting the North Carolina manual rate per \$100 of payroll from 1941 through 1956. This is a composite rate, representing all the industries in North Carolina with a hazard index roughly similar to that of the paper-making industry. It will also be noted that plotted for the same period of time are the rates of an industry which manufactures paper and cellophane at Pisgah Forest. It is significant that in 1956 the rate for the latter was approximately one-half the composite rate for North Carolina.

Hospital and surgical insurance

Hospital and surgical insurance is influenced and affected by actual (fig. 2) experience. In general, these insurance companies are non-profit organizations and the rate charged to individual industries is determined by the actual claims. On an average, 85 per cent of every premium dollar is returned to policyholders in paid claims.

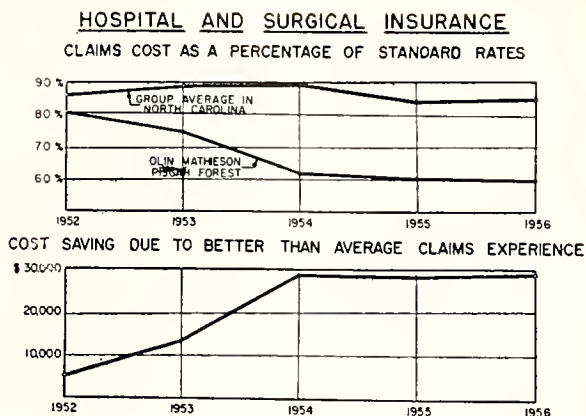


Figure 2

For the last two years the industry at Pisgah Forest has been using only about 60 per cent of its predicted quota of benefits. Again, since this is on a cost basis, the reduced number and cost of claims can be translated into actual savings. In addition, it reflects improved health for employees. The monetary difference between the claims for the industry at Pisgah Forest and the average of the state results in an annual saving of about \$30,000. This saving is very desirable, but the improvement in health reflected in this situation, though intangible, is infinitely more valuable.

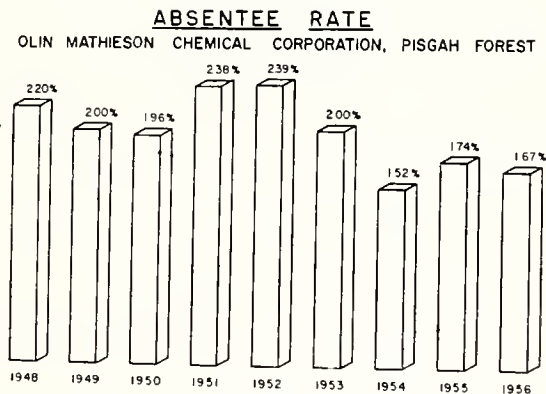


Figure 3

Reduced absenteeism

The national absence rate in industry varies between 7 and 2 per cent. An absence rate of 3 per cent is considered quite good. Figure 3 shows the absence experience at Pisgah Forest. For the worker absenteeism means lower earnings; for the industry it means disturbance of the production team. On a nationwide basis, the annual cost of industrial absenteeism is

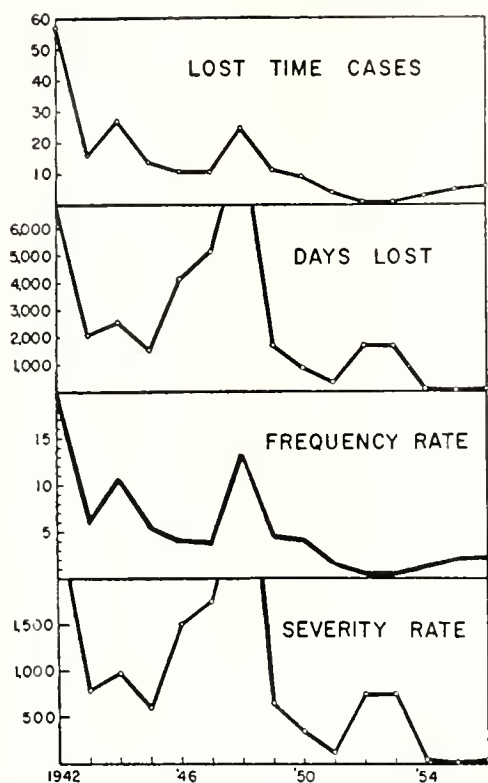


Figure 4

measured in billions of dollars. A low absentee rate certainly can be considered a dividend both to the worker and to the industry.

Lower accident rates

Figure 4 shows a series of four graphs indicating certain aspects of the accident experience at Pisgah Forest. National or state averages do not lend themselves to comparison, but the apparent trend of improvement is significant. The dividends in both human suffering and dollars saved are thought to be intimately associated with a low accident record. How much credit can the medical department claim for this improvement? That is a difficult matter to determine, but the unfavorable trend on all four curves occurred between 1946 and 1949, a period when there was no full-time medical director for the plant and when medical services were being de-emphasized. In 1949, when an aggressive industrial medical program was instituted, the former favorable trend was again realized.

Labor turnover

Industry invests a great deal of money in processing and training its employees; a

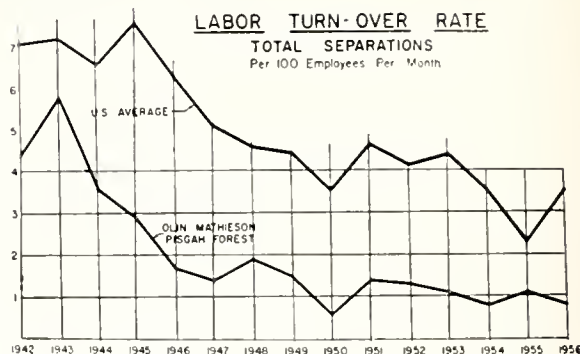


Figure 5

high turnover rate is therefore costly. In figure 5 a curve has been plotted for the years 1945 to 1956 showing the total separations per 100 employees per month as an average in U. S. industry. The lower curve shows the turnover rate at Pisgah Forest, which is considerably less than one-half the national average.

Intangible dividends

The more important dividends of any industrial health program involve:

1. Increased worker efficiency
2. Increased worker morale
3. Increased worker adjustment

These personal characteristics, when present, operate both within the plant and in home and community life. Though intangible, they nonetheless represent dividends of real value.

Health is Purchasable

It may often be asked, "Isn't a comprehensive industrial health program expensive?" Of course it is expensive, but the experience described above supports the notion that the expense of not having such a program is much greater. The implied savings on workmen's compensation insurance rates, Blue Cross claims, absence rates, labor turnover rates, and the like frequently more than outweigh the entire cost of the medical programs.

Realizing a profit is one of the principal motives of industrial management; as a result, careful inquiry concerning the costs of industrial medical activities becomes mandatory. In most situations such inquiry leads to the conclusion that industrial medical activities are profitable, and financial support and every reasonable assistance are provided in order to enable medical personnel to increase their skills in all employee-patient contacts.

Among thoughtful persons concerned with the health of large groups of people, there is an increasing realization that health is purchasable. Not necessarily the health of any specific individual, but relative health among large groups of people can be provided by the sound thinking of medical scientists and by the dollars of taxpayers and industries. As an example: typhoid fever is no longer a significant threat to the health of society. This health dividend was purchased by the clear-thinking medical scientists who developed typhoid vaccine and by taxpayers who paid for a reliable water supply. Dental health, in a relative sense, is also purchasable. The same is true of industrial health.

Recently a gynecologic examining service was conducted in the medical department of the plant at Pisgah Forest, and examinations were provided for 316 women employees. These examinations were carried

out by gynecologists from neighboring communities at a cost of approximately \$1,000. Of the 316 women examined, 185 were rated as having no significant abnormalities. The remaining 131 were referred to their personal physicians for diagnostic or therapeutic follow-up. The diagnosis of carcinoma *in situ* was made and confirmed in 3 cases. This is the earliest recognizable form of cancer of the uterine cervix. The dividends to these three women in terms of both survival and economy are not measurable, but certainly the cost of the examining service is inconsequential as compared to the benefits. In a sense, health is purchasable.

Conclusion

The field of industrial medicine is extremely interesting and stimulating. The potential of health dividends is virtually unlimited.

Attempts have been made to describe an ulcer personality; recent studies have shown that such personality groups do not exist. Nor are there specific psychic stresses that are solely ulcer producing. The young business executive is commonly and rightly described as being a good candidate for a ulcer. The great demands made upon such a person, the need for constant self-control in the face of frustrations, the high sense of responsibility—all act to create a high level of tension. But it is not only the business man that is the victim; men of any profession, women, and even children have this illness. Women who have ulcers usually give a history of serious domestic difficulties, of sexual frustration, of other emotional conflicts that are the lot of women in society today. Children may develop ulcer; commonly there is excessive friction between the parents, a feeling of being unwanted, or a sense of intense inferiority.—Krainer, S. H.: Psychiatric Factors in Therapy of Duodenal Ulcer, Illinois M. J. 110-158 (Oct.) 1956.

As a rule, it is wise for the physician not to tell the patient what to do about specific problems, for the physician not only leaves himself open to censure should something go wrong, but the solution he suggests may not be best for the patient. Rather, the physician should encourage the patient to make his own decisions and guide him by questioning. The patient will be better satisfied when he has arrived at his own conclusion. Many stresses that appear insoluble will yield to this Socratic-like method of questioning the patient. Just talking about his stresses crystallizes the problem for the patient and facilitates a solution.—Krainer, S. H.: Psychiatric Factors in Therapy of Duodenal Ulcer, Illinois M. J. 110:159 (Oct.) 1956.

The Physician and the School Health Program

B. M. DRAKE, M.D., M.P.H., F.A.C.P.M.

RALEIGH

In North Carolina the health officer is responsible, under the Board of Health, for health of the total population under his jurisdiction; he is, therefore, responsible for the health of the school child, and the family physician is responsible for the health of those school children who are his patients. At the same time the school authorities are responsible for protecting the health of the school children while they are in school. Consequently, it is essential that there be a maximum of cooperation between the health officer, the family physician, and the school superintendents, and a coordination of efforts to provide adequate health services for this segment of the population. These statements are to be understood as not in conflict with, but supplementary to, the primary responsibility of parents at all times for the health of their children. Certain areas of responsibility have been spelled out⁽¹⁾ and are generally understood. In North Carolina it is felt that certain complicating factors demand a clearer understanding of objectives and a more exact definition of methods of reaching these objectives.

Objectives

In general it might be said that the best school health program is one that anticipates and thus prevents many of the health hazards which arise during the school life of any child. This criterion, therefore, emphasizes the need for (1) more adequately planned parenthood and prenatal programs which, in turn, will assure every child the best possible start in life; and (2) a comprehensive infant and preschool health program in which each child is regularly seen by both physicians and dentists, and in which steps are taken in time to *prevent* the defects and preventable diseases which might occur during the school years and to correct promptly those defects which cannot be prevented and which otherwise will present a greater problem during the school years.

It is felt that these objectives are in keeping with the overall philosophy of any modern public health program. It is also

felt that a program designed to prevent certain defects will result in the saving of funds now being spent for correction of defects. The money thus saved can then be used for improving the health of the school population, thereby reducing absenteeism and repetition of grades—so costly to taxpayers—and for preventing many disabling conditions which may arise during or after the school years.

Preschool Program

In North Carolina the School Health Program begins, for the child, with the preschool clinic or conference. This, of course, follows earlier health care of the mother and child, including inoculations and dental care at the appropriate times. The program has, in the past, largely consisted of bringing prospective first-grade children to school, preferably with their parents, on an appointed date. There they are given a more or less superficial examination by the health officer or other physician. This is followed by a conference between parent, nurse and physician. There should also be a dental inspection by a local dentist. At the same time (or preferably during office visits) the child is given certain needed inoculations or booster injections of immunizing agents.

There has been a trend toward converting this clinic into a conference between nurse, teacher and parent, in which the parents are advised to take the child to the family physician and dentist or to the Health Department for the examination and needed immunizations. Each of these methods has certain advantages and disadvantages.

The older clinic procedure has the disadvantage of giving the child an unpleasant association with the school, in some instances resulting in "psychic trauma" and possibly causing an almost overwhelming dislike or fear of the physician in the school situation. In addition, this arrangement does not allow, in general, for utilizing the family physician's individual knowledge of the child — knowledge which in some instances has been developed throughout the child's entire life.

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On the other hand the clinic has certain definite advantages:

1. It extends health services to many children to whom needed private medical care is not readily available. In many areas the preschool clinic is the child's first visit to any physician or dentist (except in cases of illness) a fact which may be due to geographical remoteness, or to a lack of knowledge, interest or money on the part of the parents.

2. It provides a direct service for people, many of whom are not aware of the services of the Health Department and who have had no previous contact with the department. During the process the health officer can become better acquainted with the people of the area and, in general, acquaint them with the Health Department, and its objectives and services to them as taxpayers. It also allows for a better understanding of the department by the school personnel.

On the other side of the picture — the newer conference plan has the advantage of establishing a pleasant association for the child with the nurse in the school situation. The knowledge and skills of the family physician are more fully utilized. The office of the physician and the Health Department provide an opportunity for a more careful physical evaluation, together with a more detailed interview with the parents. Either method presents the opportunity to impress on parents the possibility of carrying out recommended practices for younger children in the home. A disadvantage of this type of service is that some people feel that they are being "forced" to go to the family physician or that they are being deprived of a service to which they feel entitled. Personal contacts between the Health Department staff, the school staff, and the parents may be lacking. Also, in some instances, the conference method may foster the feeling that the Health Department is only for the use of indigent or medically indigent persons.

In view of the foregoing factors, each county should work out, by means of joint planning between school and Health Department personnel, parents, representatives of local medical and dental societies, and other interested groups, the plan which is best suited to the needs of each community. In the event that a change is contem-

plated, the new program might be tried first in one or two selected schools. Results should then be carefully evaluated before the plan is extended or discontinued.

In-School Program

After the child enters school his health continues to be a joint responsibility of the parents, Health Department, school system, family physician and dentist.

Policies and procedures concerning the health appraisal, examination, and correction of defects are outlined in the publication, *Health Education*⁽²⁾. Generally, the procedure is for the parent and teacher to observe and screen the children for the more obvious defects, with the teacher referring those who need help to the public health nurse in whose district the school is situated. The nurse, in turn, refers these children, when indicated, to the health officer, family physician, or dentist. They, in turn, examine the child and determine the need for corrective procedures. Follow-up, either before or after examination, is usually accomplished through nurse-teacher-parent conferences, home visits by the nurse, or both. When school health funds are needed for the correction of defects, certification as to the need is required from the welfare department.

Health Education contains a recommendation that the children in certain grades be examined each year. In general these examinations have been made by the health officer in the school and have consisted largely of a rediscovery of defects already known to the parent, teacher, and nurse. It is felt that this examination should be made more meaningful to the child and that it should be something more than a case-finding procedure for known and unknown defects. Improvement might be accomplished through an examination program planned jointly by representatives of the school, Health Department, and medical and dental professions. The examination should be an educational experience for the child, and should result in a more careful and detailed study of his health status, particularly if it is carried out by the family physician and dentist in their offices. If the family has no physician and is indigent, the examination could be done by the health officer, or school health funds could be utilized to pay the physician.

School and Health Department policies re-

quire the examination of certain other persons in the schools, such as athletes, food handlers, and teachers. Various methods have been used for this purpose. In general, each county should work out the details of its own program, with representatives from the school, the Health Department, and medical and dental societies taking part in the planning.

Joint Responsibilities

Policies defining the use and timing of all public health activities in the school should be jointly determined by the health officer and school superintendent, with staff members of each group contributing ideas. The local medical and dental societies are, as has been pointed out, vital in the planning of the school health program. Also, the services of these organizations and of their constituent members should be available if and when possible and practical. They should share the responsibility for the examination of preschool children, those in school, and school personnel, and as a matter of course should be prepared to follow through with the correction of defects in their private patients and others who

may appropriately utilize the school health funds for this service.

Each of the groups involved in the school health program should share equally in the discharge of the community's obligation to provide children with healthy minds and bodies. This objective cannot be attained unless each one concerned recognizes the responsibility which rests on him as a member of our modern society.

Conclusion

The best school health program is one that starts during the prenatal period, that is jointly planned, and that has the health of the child as its primary objective. The health of the community and of its children is the responsibility not only of the parents and the public health and school authorities, but of all the members of the community, and should be recognized and treated as such.

References

1. Responsibility of State Departments of Education and Health for School Health Services—Washington, D. C., 1951.
2. Health Education, Publication #287 issued by State Superintendent of Public Instruction, Raleigh, July 1, 1953, pp. 34-53.

One of the great advantages of being on the staff of a teaching hospital is that the consultant is constantly liable to be subjected to criticism by his colleagues, his registrars, house officers, and students. We have not allowed, as yet, the development of the teutonic professorial infallibility supported by sycophantic juniors whose only hope of preferment lies in bowing to the pontifical utterances of the great chief. We should not allow ourselves to pass from one bed to the next without pronouncing a diagnosis, or saying quite frankly that we do know. If we prove to be wrong we must learn to eat our words and try again, but the words must be recorded by the ward clerk so that there shall be no escape. In this way we learn. "Experience," wrote Oscar Wilde, "is the name everyone gives to his mistakes."—Douthwaite, A.H.: *Pitfalls in Medicine*, Brit. M. J. 2: 897 (Oct. 20) 1956.

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"The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration. Whoever chooses this profession assumes the obligation to conduct himself in accord with its ideals"—Principles of Medical Ethics of the American Medical Association, Chapter 1, Section 1.

APRIL, 1957

A PERMANENT HOME FOR THE STATE MEDICAL SOCIETY

One of the most important subjects to come before the next meeting of the House of Delegates concerns a permanent home for our State Society. Until 1947 the record and executive office of the Society were in the home or office of each secretary. Ten years ago the Society took a long step forward when Jim Barnes was elected executive secretary and the office of the Society was moved to Raleigh.

Within this decade the membership of the Society increased more than 50 per cent—from 2,191 to more than 3,300. The present offices are woefully inadequate. The need for a permanent home for the So-

ciety has been recognized for some years. Last year Dr. Rousseau, when he was president of the Society, with the approval of the Executive Council, appointed a committee to study the problem and make recommendations. This committee's report, recommending the construction of a permanent home for the Society, was unanimously adopted by the Executive Council, and the committee was authorized to buy 52 acres of wooded land on Highway 70, half way between Durham and Raleigh, and near the entrance to the Raleigh-Durham airport.

The committee also, with the Executive Council's approval, employed a consulting architect, H. Raymond Weeks of Durham, who has submitted tentative drawings for the building. The drawings, together with a description of the proposed buildings, are to be found in a handsome brochure which was mailed to every member of the Society. If the drawings do it justice, the building will be one in which the members of the Society can take just pride.

The most important consideration is the cost of a permanent home. The estimate is between \$230,000 and \$300,000.

In order to pay for this most needed building, it will be necessary to increase Society dues. Another important source of payment is the large number of "life"—formerly called "honorary"—members, who have exempt from dues after 30 consecutive years of membership. For a long time there has been increasing—and understandably—dissatisfaction on the part of the paying members whose dues now are far more than they were a decade ago. At the last meeting of the Executive Council, it was voted to ask the House of Delegates to extend the time of active dues-paying membership except in cases of hardship.

It is hoped and really expected that many life members will recognize an obligation—moral though not legal—to contribute to the new building fund as much as they are able of the amount saved since they became life members. Many of them are still in active practice, and some are making more than when they were active members.

Most of the members should agree with the committee's statement in the brochure "that the proposed building site and en-

visioned headquarters building for the Medical Society of the State of North Carolina are a befitting tribute to the age, the dignity, and the growing importance of our society . . . "

* * *

A NEW DEFINITION OF GENERAL PRACTICE

At its recent meeting in St. Louis the American Academy of General Practice approved a new definition of general practice. Dr. George Lull, in his Secretary's Letter for April 2, says that this was requested by three different American Medical Association committees now studying general practice. The definition reads:

"General practice is that area of medical care performed by a doctor of medicine in those fields of diagnosis and therapy commensurate with his professional competence, assuming a total and continuing responsibility for the health of the individual or the family as a unit."

This new definition fits exactly the conception of a family doctor. It will appeal to many who have contended that there was a distinction between a general practitioner and a family doctor.

This distinction was made in the chairman's address to the first official section on General Practice of the American Medical Association⁽¹⁾:

"A family doctor . . . may limit his work as much or as little as he chooses. He does assume responsibility for the care of his families, very much as a general contractor would assume responsibility for the construction. Just as a general contractor, however, would sublet contracts for plumbing, heating, lighting, and other highly specialized work, so the family doctor will refer cases requiring special skill to those who are trained to handle them. This principle must have been what Hippocrates had in mind when, in his famous oath, he had the prospective practitioner promise not to "cut for the stone," but to leave that work for others better qualified."

It is quite possible—even probable—that the conception of "general practice" given in the revised definition will encourage some medical students and house officers, who have been undecided about their fu-

ture careers, to choose family practice. Furthermore, there is no reason why an internist, even if certified, should not assume "total and continuing responsibility for the health of the individual or the family as a unit," and thus be a family doctor, making house calls when necessary. So long as John Q. Citizen knows that he can depend upon someone to advise him whenever he or one of his family needs medical care, he will not expect him to do everything himself, from fitting glasses to excising bunions. Indeed, he would probably prefer that his doctor limit his practice to "those fields of diagnosis and therapy commensurate with his professional competence."

Reference

1. Will the Family Doctor Survive? J.A.M.A. 132:1-4 (Sept. 7) 1946.

* * *

LAXITY IN VITAL STATISTICS

The Public Relations Bulletin for April calls attention to a serious charge against doctors of North Carolina—of delay and carelessness in filling out birth and death certificates. In 1913 the General Assembly of North Carolina passed a law requiring that a certificate of birth should be filed within five days after the delivery, and that a death certificate be filed by the funeral director prior to removal or final disposition of a body.

In spite of this law, last year more than 12 per cent of the regular birth certificates were filed a month or more late—some one to four years late—and 17 per cent of the death certificates were filed a month or more late. In 1955, 56 per cent of the medical death certificates were signed after the date of burial.

This record is not at all consistent with the good reputation established by the North Carolina medical profession. It should be recognized that the physician has a most important legal and scientific responsibility in furnishing the cause of death on the death certificate. A great deal of importance is attached to the accuracy of his findings or opinion. Bereaved families in times of greatest sorrow must depend upon him for the most expeditious settlement of estates and payment of insurance claims. Governmental and insurance agencies must trust in his medical knowledge. Medical

and health agencies must also base their plans and programs upon his findings.

It is apparent that the physician plays a leading role in determining whether birth and death certificates are filed on time. Completeness and accuracy, although subject in large part to the person furnishing the information, can be improved if the physician is careful in his entries and insists upon completion of every item. By virtue of his position in life, he is privileged to record for posterity's sake vital events which mean so much to so many people.

* * *

BATS AND RABIES

For some time it has been known that the vampire or blood-sucking bat, which lives only in tropical countries, may transmit rabies to human beings. Only recently, however, has the discovery been made that the ordinary insectivorous bats of this country may also become infected and transmit the disease to human beings by biting them. *The New Yorker* for April 6 has a fascinating story of the discovery, beginning with the first recorded victim, a Texan woman, in October, 1951. The second recorded case was that of a Floridian boy, in June, 1953. Prompt recognition by the boy's father and by the health officer of the danger, and the administration of the Pasteur treatment, saved the boy's life.

The next two patients were in Pennsylvania. Dr. Ernest Witte, chief of the Division of Veterinary Public Health, deserves credit for saving the lives of both these patients by prompt diagnosis in each case—confirmed by laboratory examination of the bat's brain in the second.

North Carolinians, especially North Carolina doctors, will be particularly interested in learning that the late Dr. Frederick R. Taylor, with his characteristic wide reading and intellectual curiosity, was stimulated by a newspaper story of the case to write a letter to a colleague—quoted by *The New Yorker*—in which he said that he had been aware of rabies in tropical vampire bats, but was astounded to learn that the ordinary insectivorous bat had been incriminated. The letter, dated October 19, 1953, queried, "What would happen if the

Western bats that live literally by the millions in Carlsbad Caverns, New Mexico, got an epidemic started there? I have seen a high cloud of countless hordes of bats come out of the Caverns' mouth at dusk!"

A little more than two years later—February 1, 1956—the New Mexico State Department of Public Health announced that there was a rabies epidemic among the Carlsbad Caverns bats, which caused the death of hundreds of bats in August and September the year before.

The next chapter of the story about bats and rabies will be awaited with interest and some dread. Meanwhile, Dr. Taylor's many friends and former students will be proud—but not greatly surprised—to know that he was perhaps the first to forecast the possibility of an epidemic among the dense populations of Carlsbad Cavern bats.

* * *

THE MOON EYE RESEARCH FOUNDATION

Because he himself developed glaucoma which eventually made him blind 11 years ago, Mr. Thomas E. Moon of Philadelphia, a Western Electric executive engineer became deeply interested in the restoration of sight in people blinded by clouded corneas. He has given freely of his time, his engineering skill, and his money. He has succeeded in having made an instrument to hold the cornea in place and keep it from collapsing during operation. The instrument has been used successfully in animals, but has not yet been used on a human being.

In order to perfect this and other means of doing corneal transplants successfully, the Marguerite Barr Moon Eye Research Foundation, Inc., has been organized. Its headquarters are in Winston-Salem. On the board of directors are Mr. Moon and three other Western Electric engineers, and two ophthalmologists: Dr. T. N. Hamdi of Philadelphia and Dr. L. B. Holt of Winston-Salem.

The foundation has the assurance of a total of \$41,682 in grants from the U. S. Department of Health, Education and Welfare, to be distributed over 1957, 1958, and 1959. Trust funds are also being contributed to help this worthy project.

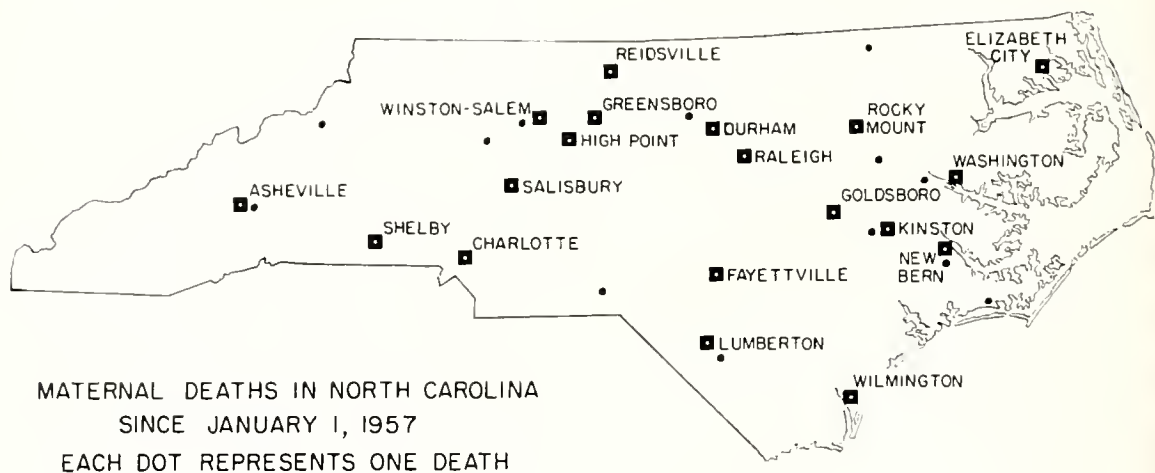
President's Message

This is the last routine President's Message that I shall be privileged to write.

It is my belief that the State Medical Society has had a successful year in spite of a few glaring mistakes. I would like to take this opportunity to thank the many members of this organization for the help and the courtesies they have given me during the past year. It has been a hard year but a very gratifying one. The experience of enjoying the respect shown the office of President of the Medical Society of the State of North Carolina and the dignity it

entails is one that I wish every member of our Society could have. This experience makes one realize more clearly the many privileges the members of our profession enjoy as well as the many obligations we must recognize. It would make each one of us more proud of the faith and trust placed in our integrity by the majority of the people of this great country. We are truly a great profession. May we always remain so.

Donald B. Koonce, M.D.



Beware of the Tap Water Enema

A warning against the use of the simple tap water enema is given by Louis S. Bardoly, M.D., executive director of the Roslyn Park, L. I., Hospital. He quotes other authorities, too, in calling attention to the danger of plain water enemas even in normal patients, stating that a "large quantity of hypotonic solution may cause an increased blood volume and secondary water intoxication, pulmonary edema, and death."

In cases of megacolon, where there is an enormously increased absorptive surface of the dilated bowel, "a large volume of hypotonic solution can rapidly diffuse into the circulation and produce water intoxication." A shock-like state immediately following the lavage is frequently seen.

Dr. Bardoly recommends, in place of the tap water enema, the Fleet Enema Disposable Unit, introduced at his hospital "by our Director of Surgery as a rapid method for cleansing the lower bowel prior to proctosigmoidoscopy."

He gives directions for administering the disposable unit and explains its uses: "A routine enema. An enema for preoperative cleansing and general postoperative use; in preparation for proctoscopy and sigmoidoscopy; to relieve fecal or barium impactions; for use in collecting stool specimens."

Dr. Bardoly's report is published in the Quarterly Bulletin, Roslyn Park, L. I. Hospital, p. 6, Spring, 1956.

BULLETIN BOARD

COMING MEETINGS

Medical Society of the State of North Carolina, One Hundred Third Annual Meeting—Asheville, May 6-8.

North Carolina State Board of Medical Examiners, meetings to interview candidates for license by endorsement—Battery Park Hotel, Asheville, May 5, and Sir Walter Hotel, Raleigh, June 18; written examination—Sir Walter Hotel, Raleigh, June 17-20.

Mountaintop Medical Assembly—Waynesville 20-22.

Student American Medical Association—Sheraton Hotel, Philadelphia, May 3-5.

Inter-American Symposium on the Peaceful Applications of Nuclear Energy—Brookhaven National Laboratory, May 13-17.

American Board of Obstetrics and Gynecology, oral and clinical examinations for all candidates—Edgewater Beach Hotel, Chicago, May 16-25.

American College of Chest Physicians, Annual Meeting—Hotel Commodore, New York City, May 29-June 2.

American Medical Association, One Hundred Sixth Annual Meeting—New York City, June 3-7.

Harvey Tercentenary Congress—Royal College of Surgeons, London, England, June 3-7.

Fourth International Poliomyelitis Conference—Geneva, Switzerland, July 8-12.

NEWS NOTES FROM THE DUKE UNIVERSITY SCHOOL OF MEDICINE

Anesthetists from hospitals and medical schools throughout North Carolina attended a special anesthesia refresher course held March 21-23 in Durham and Chapel Hill.

Designed to help anesthetists keep abreast of current developments in their profession, the course was sponsored by the North Carolina State Society of Anesthesiologists in cooperation with Duke Hospital, North Carolina Memorial Hospital in Chapel Hill, and the Veterans Administration Hospital in Durham.

* * *

Duke University, along with 16 other major educational institutions in the country, will launch a new effort to help solve the problems of the nation's aging population. The program—supported by a \$203,940 grant from the National Institutes of Health of the U. S. Public Health Service—will strive to improve university instruction and research in problems related to aging.

Dr. Ewald W. Busse, chairman of the Department of Psychiatry, Duke Medical School, is a member of the executive committee for the project and chairman of a special Training Institute to be held in the summer of 1958. Dr. Lloyd

Saville, associate professor of economics at Duke, is a member of the Inter-University Council for the project.

The Institute will be open to some 40 university faculty members, who will be awarded special scholarships. Participants will be selected by the Inter-University Council. Dr. Busse will be responsible for development of the Institute teaching plan and selection of the faculty.

* * *

A \$31,874 grant for research in psychiatric nursing has been made to Duke University by the National Institute of Mental Health, it was announced recently by Dr. Ewald W. Busse, chairman of the Duke Medical School's Department of Psychiatry.

The two-year grant will permit continuation and expansion of a project headed by Dr. Robert H. Dovenmuehle, chief of in-patient service in the Psychiatry Department. The project is centered around defining and demonstrating the nursing activities which will contribute to effective psychiatric care. Also, the Duke researchers will study the characteristics of the nurse who can best do this type of work.

Assisting Dr. Dovenmuehle are Dr. Oscar A. Parsons, assistant professor of medical psychology; Miss Faye Spring, assistant professor of psychiatric nursing in the Duke University School of Nursing; and Miss Betty Sue Johnson, instructor in psychiatric nursing.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

Dr. T. Franklin Williams of the UNC School of Medicine was recently named a Markle Scholar. It was the fifth time the UNC School of Medicine has had a faculty member to receive the award.

The award carries a cash grant of \$30,000, payable at the rate of \$6,000 a year for a five-year period. It is considered one of the highest honors in the field of academic medicine. The money is used for teaching and research. Dr. Williams is expected to work in the field of internal and preventive medicine.

Dr. Williams is a native of Belmont, North Carolina. He graduated from the University of North Carolina in 1942, received his M.A. degree from Columbia University in 1943, and got his M.D. degree from the Harvard Medical School in 1950.

Dr. Williams joined the UNC School of Medicine in 1954. Prior to coming here he had been an assistant in chemistry at Columbia, served as a communication officer during World War II, and was at Johns Hopkins Hospital from 1950-1953.

* * *

Dr. Warner Lee Wells, assistant professor of surgery, was recently named the winner of the

1957 O. Max Gardner Award. The award, a citation, also carries a cash grant of the annual income of \$25,000 placed in trust by the late Governor Gardner. The principal speaker at the annual award banquet was Governor Luther H. Hodges.

The award, created by the Gardner will, is given each year, "To that member of the faculty of the Consolidated University of North Carolina, who, during the current scholastic year, has made the greatest contribution to the welfare of the human race."

Dr. Wells, a member of the University of North Carolina School of Medicine faculty since 1952, is the translator and editor of "Hiroshima Diary." This was a Japanese doctor's account of the atomic bombing of Hiroshima. The book was published on the tenth anniversary of the bombing, August 6, 1955. It immediately became a best seller.

* * *

Dr. Carl M. Gottschalk, assistant professor of medicine, has been awarded a fellowship for established investigators. The award was made by the American Heart Association, the parent organization of the North Carolina Heart Association.

The fellowship becomes effective July 1 and runs for a period of five years. The grant of money allows the recipient to spend 75 per cent of his time in research work.

Dr. Gottschalk will continue with a project dealing with the kidney as it affects the heart.

* * *

Dr. Kerr L. White of the School of Medicine has been granted \$41,975 by the National Heart Institute of the U. S. Public Health Service for a three-year research project. Working with Dr. White, assistant professor of medicine and preventive medicine, will be Dr. Dan A. Martin, research fellow in medicine of the American Heart Association, and Dr. Charles Vernon, instructor in psychiatry, both of the School of Medicine.

The title of the study is "A Study of Life Situations, Emotions, and Central Venous Pressure." Central venous pressure refers to the pressure of blood in the large veins of the body, as opposed to the arterial pressure in the arteries which is related to the blood pressure determinations usually referred to.

During the current year \$11,845 will be expended on the study. A total of \$15,410 will be spent next year and \$14,720 will be used during the third year of the project. This new U. S. Public Health Service Grant will be used to continue studies which have been in progress for about a year. The purpose of the study is to examine some of the events and mechanisms which may be related to the development of heart failure in patients with organic heart disease at particular times in their lives. Many different factors

may frequently be important in producing heart failure in patients with diseased hearts. Among these are strenuous exercise, infection, injury and the failure to take prescribed drugs.

* * *

Dr. Ernest H. Wood, professor of radiology of the School of Medicine, attended a meeting of the American Board of Radiology in Tampa, Florida the first week in April. Early this year, Dr. Wood was elected a trustee of the Board for a six-year term.

* * *

Two professors of the UNC School of Medicine attended the Medical Education for National Defense Conference at San Antonio, Texas, March 24-29. Dr. Hubert Patterson, assistant professor of surgery, represented the clinical departments and Dr. M. K. Berkut, assistant professor of biochemistry and nutrition, represented the preclinical departments.

* * *

Dr. Henry K. Beecher, professor of research anaesthesia at the Harvard University School of Medicine, recently gave the annual Whitehead Lecture at the University of North Carolina School of Medicine. His subject was "New Work on Pain and Pain Relief." The lecture is sponsored annually by the Whitehead Medical Society of the University of North Carolina School of Medicine.

* * *

Dr. J. H. Schwab of the University of North Carolina School of Medicine has received a \$1,000 grant from the United Medical Research Foundation of North Carolina. The funds will be used to continue a research project already underway in which extracts of streptococcal cells are being studied to detect toxic products of the organism.

* * *

Dr. Warren H. Cole, professor and head of the Department of Surgery, University of Illinois College of Medicine, served as visiting professor at the UNC School of Medicine March 18 through 23.

Dr. Cole gave a number of lectures in the Department of Surgery. He also spoke in Durham on March 20 under the auspices of the Durham County Unit of the American Cancer Society.

* * *

A three-day refresher course in anesthesia sponsored by the North Carolina State Society of Anesthesiologists in cooperation with the Duke and UNC Schools of Medicine began Thursday, March 21. All meetings, on March 21, were held at UNC Memorial Hospital. The sessions on the following Friday and Saturday were held at the Duke and VA Hospitals in Durham.

More than 30 anesthetists from hospitals and medical schools from throughout North Carolina attended the meeting.

NORTH CAROLINA STATE BOARD OF HEALTH

The highway and the home still rank as the leading sites for accidental death in North Carolina, it was revealed recently in a report entitled "Accidents and Health in North Carolina, 1956," released by the Accident Prevention Section of the North Carolina State Board of Health.

The report revealed that an analysis of death certificates on file with the State Health Department showed a total of 2,481 accidental deaths in 1956, with motor vehicle accidents taking 1,210 lives and home and farm accidents claiming 784 lives.

Dr. Charles Cameron, accident epidemiologist for the Board of Health, writing in the report, cited the high incidence of home and farm accidental deaths among the children of the state.

"Home and farm accidents are the leading cause of accidental death for infants and children in North Carolina," Dr. Cameron states, "and account for a greater share of their accident fatalities than do motor vehicle accidents."

The physician stressed that the key to accident control lies in recognizing the age groups which are likely to experience different types of accidents. In addition to the high incidence of accidental deaths in the home among infants and children, the report showed that those past 50 years of age are most likely to fall prey to an accidental death within their own homes.

"Occupational accidents and motor vehicle accidents are basically an adult health problem, but the effective prevention of every motor vehicle accident and industrial accident would have little effect on the accident experience of the young and old segments of North Carolina's population."

NORTH CAROLINA HEART ASSOCIATION

Increasing numbers of individuals and organizations are remembering the dead and honoring the living by contributing through the North Carolina Heart Association to a fund for scientific heart research, according to C. R. Andrews of Greensboro, state chairman of the 1957 Heart Fund.

The North Carolina Heart Association conducts a program of research, education, and community services in North Carolina. For further information write to the state headquarters at Box 967, Chapel Hill.

MOUNTAINTOP MEDICAL ASSEMBLY

Six notable speakers will address the fourth annual Mountaintop Assembly to be held in Waynesville, June 20, 21, and 22. They are: Drs. Willis Hurst, Atlanta, Georgia, internal medicine; Robert Tidrick, Iowa City, Iowa, surgery; Ronald Stephen, Durham, anesthesiology; Lawrence Hester, Charleston, South Carolina, obstetrics;

Ellard Yow, Houston, internal medicine; and Harry Draper, Philadelphia, psychiatry.

For reservations write J. K. Stringfield, M.D., P. O. Box 347, Waynesville.

The course has been approved for 15 hours of postgraduate study by the American Academy of General Practice.

**NORTH CAROLINA ACADEMY OF
GENERAL PRACTICE****(Guilford County Chapter)**

The Guilford County Chapter of the North Carolina Academy of General Practice sponsored a symposium on Office Procedures and Clinical Medicine at Greensboro on April 10. Dr. A. Jack Tannenbaum of Greensboro acted as moderator for the morning session and Dr. George T. Wood of High Point for the afternoon session.

HOSPITAL CARE ASSOCIATION

Enrollment topped the 300,000 mark and benefit payments reached an all-time high of more than \$5½ million, to make 1956 the biggest year ever for Hospital Care Association, according to the annual report of the North Carolina Blue Cross Plan released recently.

This represented a net gain of 22,319 new members and \$896,828.17 in benefit payments, the Association said. Total enrollment at the year's end was 303,856, as compared with 281,537 at the end of 1955. Total payments to hospitals and doctors, for care and rendered subscribers, was \$5,559,738.17, for an increase of 19 per cent.

Hospital Care Association has been re-approved as a Blue Cross service plan for 1957 by the Blue Cross Commission of the American Hospital Association.

FORSYTH COUNTY MEDICAL SOCIETY

Dr. Frank Luton, professor of psychiatry at Vanderbilt University, Nashville, Tennessee, addressed the Forsyth County Medical Society at its monthly meeting held on March 12. His subject was "Mild Anxiety Reactions in Office Practice."

EDGECOMBE-NASH MEDICAL SOCIETY

The March meeting of the Nash-Edgcombe Medical Society was held on March 13, at the Benvenue Country Club.

Dr. Sam Justa, program chairman, presented Mr. Robert Pope of the State Bureau of Investigation, who discussed "Narcotics and Their Regulations."

NEWS NOTES

Dr. Ben J. Lawrence, Jr., has announced the opening of his office for the practice of general and thoracic surgery at 915 Rockford Street, Mount Airy.

NEWS NOTES FROM THE AMERICAN MEDICAL ASSOCIATION

Dr. Allman To Assume A.M.A. Presidency In June

The American Medical Association's presidential oath of office will be administered to David B. Allman, M.D. of Atlantic City, New Jersey, in impressive ceremonies at 8:30 p.m., Tuesday, June 4, in the grand ballroom of the Waldorf-Astoria Hotel, New York. Besides Dr. Allman's inaugural address, the program will also feature musical selections by the United States Army Chorus, Washington, D. C.; remarks by out-going President Dwight H. Murray, M.D. of Napa, California, and presentation of the Distinguished Service Award to the recipient selected by the House of Delegates.

A portion of the inaugural ceremony—from 9 p.m. to 9:30 p.m.—will be telecast over New York station WABD, Channel 5.

Immediately following the ceremonies, Dr. and Mrs. Allman will receive physicians, exhibitors, and guests at the annual reception in the east ballroom. The presidential ball will begin at 10 p.m. and continue until 1 a.m. in the grand ballroom.

A.M.A. Sponsors Civil Defense Conference In June

Medical aspects of radiation hazards will be the principal topic of discussion at the fifth annual National Civil Defense Conference to be held Saturday, June 1, in the Sert Room of the Waldorf-Astoria Hotel, New York. Sponsored by the A.M.A.'s Council on National Defense, the one-day meeting has been designed primarily for representatives of state, local, and national civil defense committees, physicians, and other leaders of health and medical care facilities. A special feature of this year's program will be reports by Federal Civil Defense Administration officials on plans for handling national civil defense programs and meeting radiation hazards.

Physicians planning to attend the one hundred sixth annual meeting of the A.M.A. are urged to come a day or two earlier for this worth-while civil defense meeting. Further details may be secured from the Council.

A.M.A. Wives Plan New York Session

More than 3,000 physicians' wives are expected to gather at New York's Roosevelt Hotel June 3-7 for the thirty-fourth annual convention of the Woman's Auxiliary to the A.M.A. An interesting program, combining business with pleasure, is being arranged by the committee on arrangements, under the direction of Mrs. Harry F. Pohlmann, Middletown, New York, and Mrs. Elliott V. B. Vurgason, Baldwin, New York.

STUDENT AMERICAN MEDICAL ASSOCIATION

More than 3,000 are expected to attend the seventh annual meeting of the Student American Medical Association to be held May 3, 4, and 5 in the new Sheraton Hotel, Philadelphia.

Secretary of Health, Education and Welfare Marion B. Folsom is the top speaker listed for the three-day program, which also includes a scientific presentation by C. P. Rhoads, M.D., noted cancer researchist from the Sloan-Kettering Institute. Other nationally famed doctors who will appear in a panel, "General Practice—Specialty; Trends in Practice," include Kenneth Babcock, M.D., director, Commission on Accreditation; J. S. DeTar, M.D., President, American Academy of General Practice; I. S. Ravdin, M.D., chairman, Board of Regents, American College of Surgeons, and Edward L. Turner, M.D., secretary, Council on Medical Education and Hospitals, American Medical Association. Past A.M.A. president, Elmer Hess, M.D., will serve the group as moderator.

The introduction of student research papers is another addition to the Philadelphia meeting.

AMERICAN COLLEGE OF PHYSICIANS

Included in the spring series of postgraduate courses arranged by the American College of Physicians are the following:

May 13-17: Internal Medicine; University of Chicago Department of Medicine, Chicago, Illinois.

May 20-24: Early Detection and Prevention of Disease; University of Pennsylvania, Department of Public Health and Preventive Medicine, Philadelphia, Pennsylvania.

May 20-24: Internal Medicine; Louisiana State University of School of Medicine, Postgraduate Division, Shreveport, Louisiana.

May 27-31: Cardiology; National Institute of Cardiology of Mexico, Mexico, D.F.

May 27-31: Internal Medicine; New York University Postgraduate Medical School, New York.

June 10-12: Ballistocardiography; Pennsylvania School of Medicine, Philadelphia.

Where facilities are available, these courses will be open to non-members with adequate preliminary training. However, by direction of the Board of Regents, registration from non-members of the College may not be accepted more than three weeks in advance of the opening of any course. Non-members may file their applications in advance and will be placed on the waiting list in accordance with order of receipt. Address E. R. Loveland, Executive Secretary, 4200 Pine Street, Philadelphia, Pennsylvania.

Fees are \$30 per week for members and \$60 a week for non-members.

NINTH POSTGRADUATE ASSEMBLY IN ENDOCRINOLOGY AND METABOLISM

The ninth Postgraduate Assembly in Endocrinology, sponsored by the Endocrine Society, the Medical College of Georgia, and the Medical College of Georgia Foundation, will be held in Augusta, Georgia, October 21-25.

The faculty will consist of 22 eminent clinicians and investigators from various parts of the country in the fields of endocrinology and metabolism. The program will cover the various endocrinopathies, with emphasis on the clinical aspects, demonstration of laboratory tests, presentations of cases, and question and answer panel discussions. The course is designed to cover the main aspects of diagnosis and therapy in the field of endocrinology and metabolism for the physician in general practice and for those in other specialties who wish to have a general knowledge of this rapidly growing field.

A syllabus with brief abstracts of lectures will be available to the registrants at the time of the Assembly.

The course has been approved by the American Academy of General Practice for 35 credit hours in Category 1.

For further information concerning the program and registration, write to Dr. Robert B. Greenblatt, Department of Endocrinology, Medical College of Georgia, Augusta, Georgia. Registration is limited to 100; tuition fee is \$100.00. Rooms will be reserved for the students and faculty at the Bon Air Hotel. Residents and fellows will be admitted for \$35.00.

AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS

District IV of The American College of Obstetricians and Gynecologists will meet in Washington, D. C. on October 4 and 5, 1957. The states comprising this District are: District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, Puerto Rico, and the Virgin Islands. Physicians of these states are invited to attend the scientific and social functions of the meeting. Additional information may be obtained by writing Frank R. Lock, M.D., Bowman Gray School of Medicine, Winston-Salem, North Carolina, District Chairman, or Robert H. Barter, M.D., 901-23rd Street, N.W., Washington, D. C., chairman of the program.

Distinguished speakers who will appear on the program include Dr. Alan Guttmacher, New York, "Biologic Aspects of Twin Pregnancy"; Dr. Francis Ingersoll, Boston, "Carcinoma of the Endometrium"; Dr. Michael Jordan, New York, "Management of Cervical Lesions"; Dr. Donald DeCarle, San Francisco, "Some Factors in the Etiology of Uterine Proliferation in Nulligravid Women"; Dr. Curtis

J. Lund, Rochester, "Heart Disease in Pregnancy"; Dr. Louis M. Hellman, Brooklyn, "Some Aspects of Postmaturity"; Dr. William Mulligan, Boston, "Surgery for Infertility"; Dr. Jerome Menaker, Wichita, "Psychomatic Gynecology"; Dr. Paul Bowers, Philadelphia, "Role of the Obstetrician-Gynecologist in the Diagnosis and Treatment of Breast Disorders"; and Dr. Robert Beebe, Chicago, "Management of Urethral Diverticula."

The banquet on Friday evening will have as its speaker Mr. Theodore Koop, Director of Washington News and Public Affairs, Columbia Broadcasting System, Washington, D. C.

NATIONAL FOUNDATION FOR INFANTILE PARALYSIS

An emergency call to action on the polio front was sounded by leaders of the American medical profession in Chicago on January 26. This is pointed out in the new booklet of "Information for Physicians on the Salk Poliomyelitis Vaccine," No. 4, February, 1957, published by the National Foundation for Infantile Paralysis, under the editorship of Thomas M. Rivers, M.D., medical director. A summary of the proceedings of the meeting in Chicago, which resulted in the American Medical Association's heartily deciding to spearhead a nationwide polio vaccination program, is presented.

"I implore and urge you to do everything possible to get your state and county medical societies behind the A.M.A. polio campaign to encourage everyone to be vaccinated up to age 40," said Dwight H. Murray, M.D., president of the American Medical Association, at the meeting. The ten-man A.M.A. Committee on Poliomyelitis, of which Dr. Murray is a member, similarly endorsed the 1957 nationwide vaccination drive.

Preliminary studies among persons with three properly spaced doses of vaccine suggest that the full course of inoculations may be better than 90 per cent effective against paralytic polio, noted Dr. Rivers in the editor's introduction to the newly published booklet. This recommended dosage schedule of the Salk vaccine is three 1 cc. injections, the second injection to be given two to six weeks after the first and the third (booster) injection seven to 12 months after the second.

EXCERPTA MEDICA FOUNDATION

Abstracts from Russian medical and research literature are being made available to the western world this year for the first time in history, it was reported to the National Foundation for Infantile Paralysis by the Excerpta Medica Foundation of Amsterdam, the Netherlands.

The Excerpta Medica Foundation has provided abstracts from foreign literature on poliomyelitis financed by a grant from the National Foundation

for Infantile Paralysis since 1951. In turn, the Division of Professional Education of the National Foundation distributes these abstracts along with abstracts of literature in this country to all grantees and investigators cooperating in the field of poliomyelitis research and to many other research workers and clinicians throughout the world.

In February, 1957, Excerpta Medica announced that it had obtained the cooperation of a number of leading medical scientists in the U.S.S.R. for this project. Some thirty members of the U.S.S.R. Academy of Medical Sciences, under the chairmanship of Professor A. V. Lebedinsky, have undertaken to provide a comprehensive service of abstracts of the current Soviet medical literature, including reports of work done in the U.S.S.R. in the field of poliomyelitis.

EXCERPTA MEDICA FOUNDATION

Our knowledge of the cardiovascular diseases is expanding rapidly through intensive research all over the world. To keep abreast of the great volume of medical literature now brought within the scope of investigations into the causes of these diseases and their clinical treatment is increasingly difficult.

Excerpta Medica, with more than a decade of experience in comprehensive abstracting and publishing, now announces the appearance of a new abstracting publication devoted exclusively to cardiovascular diseases. This has been made possible by the generous financial support of the National Heart Institute, U. S. Department of Health, Education, and Welfare. For the first time, comprehensive abstracts of the world's medical literature in the field of cardiovascular diseases are now available.

Approximately 800 pages of abstracts will be published in Volume 1, 1957. The annual subscription fee is \$15.00, inclusive of an annual authors' and subject index.

PAN AMERICAN SANITARY BUREAU

The solution of the international public health problem of highest priority in the Americas has been advanced one step forward by a special contribution of \$1,500,000, made by the United States Government to increase the special fund of the Pan American Sanitary Organization for malaria eradication.

"Malaria is still a leading cause of death in many parts of the world, including some areas in the Americas," stated Dr. Fred L. Soper, director of the Pan American Sanitary Bureau, Regional Office of the World Health Organization, in a ceremony in which the representative of President Eisenhower, Dr. Milton S. Eisenhower, presented the check from his Government.

"Its continued existence anywhere in this hemisphere threatens reinfection in all areas where malaria has been eradicated," Dr. Soper added.

JOHN AND MARY R. MARKLE FOUNDATION

The John and Mary R. Markle Foundation announced recently the appointment of 25 Scholars in Medical Science, all faculty members of medical schools in the United States and Canada. The sum of \$750,000 was appropriated toward their support to the schools where they will teach and carry on research.

With these appointments the fund completes ten years of a program to aid young medical school faculty members seeking careers in teaching and research. In the decade, 206 doctors in 74 medical schools in the United States and Canada have received help from appropriations totaling \$6,070,000. For each Scholar appointed, the fund has allocated \$30,000, granted at the rate of \$6,000 annually for five years to their medical schools. Among the schools receiving grants toward the support of the Scholars are Duke University School of Medicine for Sanford I. Cohen, instructor; and the University of North Carolina School of Medicine for T. Franklin Williams, M.D., assistant professor.

AMERICAN CONGRESS OF PHYSICAL MEDICINE AND REHABILITATION

The Editorial Board of the Archives of Physical Medicine and Rehabilitation has established a special subscription rate of \$5.00 per year to be granted to bonafide residents in physical medicine and other specialties in the United States, its territorial possessions, Mexico, Canada, United Kingdom and Europe. The following rules apply:

1. The subscription may be entered for a period not to exceed three years.
2. All orders for this special rate must be accompanied by a letter of verification from the director of the training program confirming the resident's status and the number of years remaining in the resident's training program.
3. This special rate is not applicable if less than one year of training remains to be completed in the applicant's residency program.
4. The subscription is not transferable and must be entered in the resident's name. It cannot be sent to a hospital, organization, institution, or a person other than the subscriber.

Those desiring to avail themselves of the special rate to residents should write to:

Archives of Physical Medicine and Rehabilitation
30 North Michigan Avenue
Chicago 2, Illinois

AMERICAN MEDICAL ASSOCIATION POST-SESSION TOURS

Post-session tours to Europe and Bermuda are being offered A. M. A. members following the Association's Annual Session in New York City, June 3-7, 1957. Two European tours are offered—one of 24 days to France, Italy, Switzerland, Belgium, and France, and one of 38 days, to England, Belgium, Holland, Germany, Switzerland, Austria, Italy and France.

In cooperation with the World Medical Association, special scientific sessions of exceptional interest have been planned in London, Paris, and Geneva.

In addition to Europe, the post-session program includes three trips to Bermuda, designed for those who may not have sufficient time for a European vacation. One trip is five days long—the other eight days, with an opportunity to make the round trip by air, or go one way by air and one way by steamer.

For further information address William J. Glennon, P.O. Box 3433, Chicago 54, Illinois.

WORLD MEDICAL ASSOCIATION

Plans are maturing for the second annual meeting of members of the United States Committee of World Medical Association to be held during the course of the American Medical Association meeting in New York. The U. S. Committee will meet at the Waldorf Astoria on Tuesday, June 4, at 3:00 p.m.

* * *

Program Suggestions Solicited for "Open Meeting"

The major purpose of our Annual Meeting for the membership of the U. S. Committee is to bring our members into closer contact, to discuss ways and means of achieving the vital objectives of W.M.A. and its U. S. Committee. This is your meeting, and we want the program to meet your wishes. Therefore, we would greatly appreciate having your suggestions as to the subjects you would like to have presented or discussed. Have you any specific questions you'd like to have answered? If so, please write us at your convenience.

* * *

"Open House" at W. M. A. Secretariat Office in June

During the entire week of the A.M. A. meeting, June 1-6, 1957, there will be "open house" for U. S. Committee members at the W.M.A. office on the twelfth floor of the Coliseum Towers, immediately adjoining New York's famous Coliseum, where the A.M.A.'s Scientific and Technical Exhibits are to be housed. Come up and see us, for a welcome respite from the exhibit crowds, join us in a cup of coffee, and see the home office of the "international voice of medicine."

SEVENTH INTERNATIONAL CANCER CONGRESS

The Seventh International Cancer Congress will be held in London, England, July 6-12, 1958, under the presidency of Sir Stanford Cade. Congress headquarters will be The Royal Festival Hall.

There will be two main sessions of the Congress: A. Experimental, and B. Clinical; Cancer Control. Special emphasis will be placed on hormones and cancer, chemotherapy, carcinogenesis, and cancer of the lung.

Proffered papers will only be considered if submitted with an accompanying abstract (not over 200 words) before October, 1957, and if dealing with new and unpublished work.

The registration fee for the Congress will be \$30, and the latest date for registration without late fee will be January 1, 1958.

Registration forms and a preliminary program will be available early in 1957 on application to The Secretary General, Seventh International Cancer Congress, 45 Lincoln's Inn Fields, London, W. C. 2, England.

UNITED STATES ATOMIC ENERGY COMMISSION

Award of eighteen unclassified life science research contracts in the fields of medicine and biology was announced recently by the U. S. Atomic Energy Commission. The contracts were awarded to universities and private institutions as part of the AEC's continuing policy of assisting and fostering research and development in fields related to atomic energy as specified in the Atomic Energy Act of 1954.

* * *

An Inter-American Symposium on the Peaceful Applications of Nuclear Energy will be held May 13 through 17, at Brookhaven National Laboratory. The agenda is designed to stimulate efforts among the American republics to develop and utilize the beneficial applications of nuclear energy. The Symposium is being conducted by the Brookhaven National Laboratory and jointly sponsored by the Atomic Energy Commission, the Department of State and the International Cooperation Administration.

1. Uses of radioisotopes in industry, agriculture, and medicine
2. Nuclear reactor types and uses—prospects of nuclear energy as a source of commercial power
3. Factors in organization and development of effective nuclear energy programs.

Proceedings will be published in full.

Following the five-day symposium, the participants will tour atomic energy facilities, hospitals,

universities and industry to observe how the peaceful atom is being put to work in the United States and how this might be applied to other American countries.

HARVEY TERCENTENARY CONGRESS

June, 1957, marks the Tercentenary of the death of William Harvey, who discovered the circulation of the blood. This is of great historical importance to scientists not only in this country but throughout the world.

It is proposed to commemorate the occasion by holding an International Congress on the Circulation from June 3 to 7, in the Royal College of Surgeons, London. The range of subjects covers every aspect of the circulation. Further particulars may be obtained from the Secretariat, The Royal College of Surgeons, 11 Chandos Street, Cavendish Square, London, W., and a complete program, giving details of both the scientific and social activities will be available.

SCHERING AWARD-WINNING STUDENTS ANNOUNCED

A unique "writing partnership" between two United States medical students netted them two out of three top awards and \$1,000 cash in the Schering Award for medical students.

Successful contestants Charles King Mervine and David Charles Schechter, who are both attending Jefferson Medical College in Philadelphia, co-authored the two prize-winning papers, topping entries from more than 80 other medical schools. Subjects of their papers were "The Prevention and Treatment of Blood Transfusion Reactions" and "The Management of Osteoporosis".

The eleventh annual Schering Award competition is now underway. Subjects this year are: "The Clinical Use Adrenocortical Steroids in Collagen Diseases"; "Metabolic Aspects of the Aging Process"; and "New Applications of Antihistamines in Medicine and Surgery".

The Award's aim is to encourage medical writing in the hope that later during their careers many of the students will contribute to the professional literature.

DEPARTMENT OF THE ARMY OFFICE OF THE SURGEON GENERAL

Brigadier General Sam F. Seeley, who now commands Valley Forge Army Hospital, Phoenixville, Pennsylvania, will join the Army Surgeon General's Office in Washington as chief of the professional division on April 1, following the retirement of Major General James O. Gillespie.

Army hospitals in this country and overseas will welcome 164 graduates from 71 approved medical schools as interns for the year beginning July 1. The interns represent all sections of the United

States and were selected by the Army Medical Service in participation with the sixth National Intern Matching Program.

This is the largest number of medical interns to be admitted at one time by the Army Medical Service since the establishment of such training.

(Bulletin Board continued on page 176)

Cough Suppressant Given New Name

The potent cough suppressant formerly known as narcotine, has been given a new generic name which removes the connotation that the antitussive is a dangerous narcotic. The new term approved by the American Medical Association is "noscapine". The change also has the blessings of H. J. Anslinger, Commissioner of the U. S. Bureau of Narcotics, and Nathan B. Eddy, Secretary of The Committee on Drug Addiction, National Research Council of the Institute of Health.

Use of the new term is expected to increase the use of cough preparations containing noscapine. A spokesman for Merck & Co., Inc., which manufactures noscapine for cough medicines under the brand name Nectadon,* indicated that his firm felt the name change was a definite contribution to public health.

"When noscapine was called 'narcotine', many people regarded it as an addicting drug because the term so strongly suggests it. Not only is this cough suppressant non-addictive, but it is non-toxic as well. Moreover, noscapine has no ill effect on blood pressure or respiration. We think the American Medical Association has performed a real public service in removing an unfortunate term from cough preparation labels, which no doubt caused a lot of potential users to shy away."

*T. M. Reg. U. S. Pat. Off.

New Film on Diabetes

The film "Urine Sugar Analysis for Diabetics," developed in cooperation with the medical profession, is available at no charge to the Medical and Allied Professions through Ames Company, Inc.

The film was made as a visual aid to be used in the education of diabetic patients and shows the relationship between carbohydrates and insulin. It also explains in lay language the meaning of various diabetic conditions. It has been produced on 16 mm. film in color and sound track with a running time of approximately 10 minutes. Appropriate "hand-out" literature accompanies the film.

Showings at Diabetic Clinics, Diabetic Lay Societies, and other diabetic groups must be requested by the Medical or Allied Professions to Ames Company, Inc., Elkhart, Indiana or Ames representative.

The Month in Washington

The Army's Office of Dependent Medical Care, handling the new program that offers private medical care to service families, is working on some long- and some short-range plans of importance to state societies.

To meet a problem coming up in the next few months, the office is notifying states that contracts for physicians' services, negotiated through the state societies last fall, will be extended automatically when their expiration date of July 1 arrives. However, there is no definite time period set for any of the extensions; each contract will be continued in effect until that particular state's agreement has been renegotiated.

When the contract is extended, according to Major General Paul I. Robinson, head of the Office of Dependent Medical Care, it will be possible to make necessary adjustments, but he hopes not too many changes will be asked at that time.

Then, after July 1, each state will be given 60 days' notification before the Defense Department makes its final audit covering the period from December 7, 1956, when the program went into effect, through June 30, 1957. This audit has been promised in each state before renegotiation starts.

Both the state fiscal agents and General Robinson's staff should be well prepared for renegotiations when the time arrives. No renegotiations will be undertaken until January, 1958. They will continue for most of next year, on a tentative schedule that calls for handling about five contracts per month.

Under this tentative arrangement, the contract with the Medical Society of the State of North Carolina will be renegotiated during the month of September.

* * *

If any large-scale health and medical program is to be pushed through Congress this year, most of the pushing will be done by the Democrats, who, in control on Capitol Hill, can get what they want, in theory at least.

Announcing that the idea of a special presidential health message had been drop-

ped for this year, Secretary Folsom also said the Republican administration would press for only three major health-medical bills. All three, incidentally, were before Congress last year, but were not acted upon. They are:

1. Federal assistance to medical, dental, and public health schools to help them build and equip new teaching facilities or improve and expand existing classrooms or labs.

2. Waiver of the anti-monopoly laws to permit small companies (none doing more than 1 per cent of the total business) to pool some of their funds for experimental work in expanding voluntary health insurance.

3. Authorization for construction of sanitary facilities on Indian reservations.

In outlining these legislative objectives of the administration, the Secretary took the opportunity to make clear he doesn't think much of one bill that has the ardent support of some Democrats and of some labor leaders. It would have the United States pay for 60 days' free hospitalization annually for persons aged 65 and over who are under social security, and their dependents if also over 65.

Mr. Folsom said the social security administration has all it can do administratively to put into effect the major amendments passed last year, and that besides the "hospitalization at 65" plan skirts so close to the area of compulsory health insurance that it should be regarded cautiously.

NOTES

A House committee, making a survey of the cost of veterans' programs, has been asked by VA Administrator Harvey Higley to ponder this question: Should more VA hospitals be constructed when we know beyond doubt that they will be largely for the benefit of non-service-connected cases?

* * *

As anticipated, pressure already is on Congress to drop or lower the age 50 limit for OASI payments because of disability. Many bills have been introduced on the subject.

* * *

Congressmen are hearing again from the friends of the "Hoxsey cancer cure," which has been under constant attack by Food and Drug Administration but still

manages to stay in business. Form cards, carrying space for a name and address, are being received on Capitol Hill, each asking Congress to investigate FDA for the way that agency has pressured the Hoxsey people.

* * *

An addition to the echelon of the Department of Health, Education, and Welfare is a young (33) assistant to Secretary Folsom, who holds both medical and law degrees. He is Dr. Robert H. Hamlin, of Brookline, Massachusetts. Another HEW addition is John A. Perkins, Ph.D., president of the University of Delaware, the new Under Secretary.

Tempra, a new pediatric antipyretic-analgesic in two liquid dosage forms—Tempra Drops and Tempra Syrup, has been introduced by Mead Johnson & Company.

Tempra is *n*-acetyl *p*-aminophenol, a safe, effective agent for relief of fever or pain, and is designed for convenient and accurate oral administration to infants and children. Tempra will be marketed on a prescription only basis.

Its indications include common cold, tonsilitis, headache, grippe and many other illnesses in which fever or pain, or both, are present.

The fever-reducing activity of Tempra is two-fold: (1) its action on the brain's temperature-regulating center, which brings about heat loss through reflex cutaneous vasodilatation; (2) its ability to mobilize body water to bring about hemodilution and heat loss through sweating.

Its pain-relieving property lies in a selective central depressant action, apparently on centers below the cerebral cortex.

Satisfactory results were obtained in clinical trials designed to test Tempra's fever-reducing ability. In one, 58.5 per cent of a series of 37 patients showed temperature decrease of 2 or more degrees in 4 hours, and 84.1 per cent showed a decrease of 1 to 2 degrees in the same period. Another test showed 88.5 per cent of a series of 35 children responded favorably to Tempra as a fever-reducing agent.

Other studies have shown Tempra will not: (1) produce anemia; (2) irritate the gastrointestinal tract; (3) disturb acid-base balance; (4) upset blood electrolyte balance, and (5) produce gastric bleeding.

Both Tempra dosage forms are appealingly colored and flavored. Tempra Drops, first pediatric antipyretic-analgesic in drop form, is a red-colored liquid having a wild cherry taste. Tempra Syrup is green and is mint-flavored.

BOOK REVIEWS

Ageing In Transient Tissues, Vol. 2, Ciba Foundation, Colloquia on Ageing, Edited by G. E. W. Wolstenholme and E. C. P. Millar. 263 pages. Price, \$6.75. Boston: Little and Company, 1956.

The topics dealt with in this volume are diverse in nature, but all concern the process of ageing in transitory structures, such as organs of the embryo which undergo degeneration before birth, as in the case of portions of the originally bisexual reproductive tract; redundant follicles; the corpus luteum; the placenta; the antlers of deer; and human red blood cells.

Many workers in gerontology have had occasion to speculate about the relationship of the "ageing" of individual cells or circumscribed masses of tissue to the ageing of the organism. The Ciba Foundation has made it possible for us to learn through this volume what a number of authorities, in prepared papers and in open discussion, have to say about the development and degeneration of transient structures.

The general impression gleaned from these papers and the discussion of each of them is that they present a large amount of interesting data and much food for thought. On the other hand, there seems to be rather little unifying material running through the various papers. Perhaps this would be too much to expect. Much of the value of such a series is, of course, contained in the discussion at the end of each, and in the general discussion which is placed at the close of the work.

To the gerontologist the question as to whether the term "ageing" really is permissible in relation to such diverse subjects as the changes in transitory fetal structures, in the placenta, in red blood cells, and in deer antlers is very important. While these structures are going through a process of development which continues to a degenerative stage and eventual dissolution, resorption, or casting off, as the case may be, we wonder how closely parallel to the process of the ageing of an organism these changes are.

In the discussion it is interesting to find the denial of the existence of certain processes, such as that of amitosis, on the grounds of what the reviewer cannot help but feel is a somewhat outworn prejudice, since he himself has observed all stages of this process in liver, salivary glands, and nervous system of senile organisms.

While the General Discussion is a stimulating section, it is somewhat discouraging to find, as so often is the case, a lack of clarity as to whether "growth and differentiation" are a part of "ageing," and as to whether "ageing" is different from "senescence." It would seem time for some group,

such as the International Association of Gerontology, to set up a series of definitions of such terms in the major languages to assist in our communication of scientific facts and concepts.

Experimental Methods for the Evaluation of Drugs in Various Disease States. By Bradford N. Craver and Others.

Annals of the New York Academy of Sciences, Vol. 64, Article 4. 731 pages.

This monograph consists of 21 papers devoted to some of the physiopathologic and pharmacologic aspects of various disease states. Much emphasis has been placed on the disorders of later years, for example, the collagen diseases, angina pectoris, cardiac arrhythmias, atherosclerosis, and certain disturbances of the central nervous system. Many of the laboratory procedures employed in the screening of drugs were evaluated; this part should prove particularly useful to the pharmacologist. The reports concerned with correlation of laboratory data and clinical trial should be of great interest to the physician inclined toward experimental medicine.

Salicylates Urged In All Cases Of Rheumatoid Arthritis

Aspirin, or another salicylate, should be prescribed for every patient with a proven diagnosis of rheumatoid arthritis who has joint pain, according to Drs. Arthur Perry Hall and Theodore B. Bayles.

Writing in the *Connecticut State Medical Journal* (20:943, 1956), they state that dosage must be on an individual basis since maximum pain relief varies from patient to patient. The amount of salicylate should be increased to find the best schedule and demonstrate the drug's analgesic qualities to doubting patients, even "to the point of minor side reactions, if necessary." A dose of 10 to 15 grains, four to six times daily, was generally used by Dr. Hall, of Peter Bent Brigham Hospital, and by Dr. Bayles, of Harvard Medical School.

Conservative treatment is called basic in managing all cases of rheumatoid arthritis. In three case reports cited by the authors, the other measures followed were mental and physical rest, physical medicine and controlled diet, in addition to aspirin. Between 70 and 80 per cent of all cases treated in the first six months of their disease are either greatly improved or attain spontaneous remission with conservative therapy alone, the doctors state.

Use of gold salts, steroids and phenylbutazone should be held in reserve, it is noted.

In Memoriam

LEIGHTON W. HOVIS, M.D.

The community and medical profession suffered an irreparable loss in the death of Dr. Leighton W. Hovis on December 30, 1956.

Dr. Hovis was born November 11, 1879, in Mecklenburg County, son of Zenas Alexander and Cora Herron Hovis. He was educated in the public schools and then attended the University of North Carolina for his academic work and first two years of medicine, finally completing his medical course in the North Carolina Medical College.

Except for four years in the army and a period of training in eye, ear, and throat, he had practiced medicine in Mecklenburg County since 1904. For 15 years following his graduation, he did general practice in the Hoskins section of the county.

At the outbreak of the war in 1917, Dr. Hovis enlisted in the Medical Corps as a First Lieutenant and was sent to Camp Oglethorpe, Georgia. Later he was made Captain of the 78th Division and in May, 1918, he was placed in charge of Field Hospital No. 309 in France, where he served for one year with the rank of major in the Medical Corps.

After his discharge from the army in June 1919, he did postgraduate work at the Postgraduate Hospital, New York Eye and Ear Infirmary and at Tulane University, New Orleans. On his return to Charlotte in 1921, he became associated with Dr. A. M. Whisnant in the specialty of eye, ear, nose and throat.

On May 3, 1905, he married Miss Mary Louise McGee of Mecklenburg County, Charlotte, North Carolina. They had no children.

Dr. Hovis' activities and honors were numerous. He was a past president of the Mecklenburg County Medical Society and the North Carolina Eye, Ear, Nose and Throat Society. He was one of the first two members of the North Carolina Medical Society FIFTY YEAR CLUB. He was a past president and a charter member of the Charlotte Civitan Club and a member of the Good Fellows Club.

Dr. Hovis, during his long span of service to his community, was a family physician, counselor, friend, and banker to many of his patients. He was an educated, cultured, christian gentleman, and was an elder in the Covenant Presbyterian Church. He was an active member of the Second Presbyterian Church when it combined with Westminster Church to form the Covenant Church.

Respectfully submitted this fifth Day of March, 1957.

Mecklenburg County Medical Society
Philip Noumoff, M.D.
M. Robert Link, M.D.

BULLETIN BOARD

(Continued from page 172)

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

The launching of the first, nationwide cooperative research attack against cerebral vascular disease was announced recently by Surgeon General Leroy E. Burney of the Public Health Service. This disease, commonly known as "stroke," is the Nation's third-ranking killer.

Ten medical research centers in nine states have already joined in the program, and it is expected that 35 to 40 institutions will ultimately participate, Dr. Burney said. Duke University is included among the cooperating institutions.

VETERANS ADMINISTRATION

Veterans Administration is cooperating with the American Medical Association in a nationwide program for mass immunization of the population against polio, according to an announcement by Deputy Chief Medical Director Dr. R. A. Wolford of VA central office in Washington, D. C.

Dr. Wolford said VA employes who choose to receive the Salk injections will procure the vaccine at no cost to the government. The vaccine will be administered without charge by VA physicians who volunteer for the duty at participating VA hospitals and clinics.

* * *

A device that makes testing sputum for tuberculosis germs in the hospital laboratory safer and easier has been developed by a Veterans Administration bacteriologist, VA announced recently. It is an agitator for sputum specimens, made from a new kind of paint shaker by Abraham L. Rosenzweig at McGuire VA Hospital in Richmond, Virginia.

VA has adopted the device as a standard item for its 173 hospitals.

* * *

Results of Veterans Administration experience with tranquilizing drugs (promazine and chlorpromazine) and plans for further drug studies will be reported at VA's third annual conference on chemotherapy in psychiatry May 9-10 at the Downey, Illinois, VA hospital. The announcement was made by Dr. Jesse F. Casey, director of the psychiatry and neurology service at VA central office in Washington, D. C.

Dr. Casey is acting chairman of the executive committee for VA's nation-wide evaluation of tranquilizing drugs in mental illness. The cooperative study now is underway in 40 VA hospitals.

* * *

Dr. Robert M. Zollinger, professor and chairman of the Department of Surgery at Ohio State University, is the new chairman of the Veterans

Administration Special Medical Advisory Group, VA has announced.

He was elected at the group's quarterly meeting in VA central office at Washington, D. C., to succeed Dr. Wendell G. Scott, professor of radiology at Washington University in St. Louis, who will continue as a member of the Group.

* * *

Veterans with service only during peacetime are not entitled to Veterans Administration hospitalization without service-connected disabilities, VA has announced in answer to inquiries.

The only conditions under which peacetime veterans may be admitted to VA hospitals, the agency said, are: (1) if they were discharged under other than dishonorable conditions for a disability incurred in line of duty; or (2) if they are receiving VA compensation for a service-connected or service-aggravated disability.

VA said peacetime service for the purposes of hospitalization is any period of active service that occurs before or after a war and does not extend into a war period, as defined by Congress.

Special eligibility requirements apply to peacetime veterans who have been retired from active time service. VA said these veterans should check their eligibility with VA before applying for hospitalization.

* * *

Electric and insulin shock treatment for mental illness has been reduced by an estimated 90 per cent at Veterans Administration mental hospitals through use of the new tranquilizing drugs, VA announced recently.

In addition, the tranquilizers are permitting better treatment for mentally ill veterans, with the result that more patients can return home by discharge from hospitals and trial visits, Dr. Ivan F. Bennett, Chief of Psychiatric Research in the VA Central Office at Washington, D. C., said.

The drugs enable VA hospitals to make more efficient use of personnel, since there is no longer a need to maintain teams of personnel in shock units. These personnel now can work directly with patients in their other activities, Dr. Bennett said.

CALIFORNIA CAREER OPPORTUNITIES FOR PHYSICIANS AND PSYCHIATRISTS

Employment available as a result of interview, only. Interviews at the APA Conference May 13-17 in Chicago and in such other locations as New York, Boston, St. Louis, Philadelphia, and Minneapolis during May and June. Assignments in State hospitals, juvenile and adult correctional facilities, or a veterans home. Three salary groups: \$10,860-12,000; \$11,400-12,600; \$12,600-13,800. Citizenship, possession of, or eligibility for California license required.

Write:

Medical Recruitment Unit, Box A.
State Personnel Board
801 Capitol Avenue
Sacramento 14, California.

NORTH CAROLINA

Medical Journal



Vol. 18 No. 5
May, 1957

IN THIS ISSUE:

PRESIDENT DONALD KOONCE'S FAREWELL ADDRESS

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President's Farewell Address

DONALD B. KOONCE, M.D.

WILMINGTON

It is the obligation of every man to see that his brother gets a square deal. It is even more the obligation of every member of the medical profession to assure the welfare of every human being. As Christ bade his followers, "Heal the sick." "The young, the aged, and the sick must always be helped." Thus the doctor's first and primary obligation becomes the individual welfare of his patient.

Many times this obligation entails more than the individual's medical welfare, and often it involves his economic welfare. We cannot too strongly oppose any form of third party domination. We cannot, however, deny or fail to accept third party participation. Present-day economic considerations demand this. Our antagonism to interference should be well studied and carefully considered. We should never place the aims and ideals of the medical profession before the ultimate good of the patient. We should make sure that those aims and ideals are compatible with his ultimate welfare and then use every available means to support them.

The medical profession has too long been on the defensive, looking for the possibility of an attack, often exaggerating the dangers, and too frequently stressing the negative side of the situation. It is high time that we realized the very positive nature of our obligation to our people and their dependency on us.

In traveling through this state and nation during the past year, I have been markedly impressed by the complete change in the attitude of the general public towards the medical profession. No longer are we in disrepute. The general public

respects and admires us. They do not particularly appreciate our negative and defensive attitude. They are no longer hypercritical of us as a so-called privileged class, nor do they resent our prosperity. The attitude which I have met is that "our doctors work hard for what they have and they are entitled to the things which they have earned."

In the past few years I have attended too many medical meetings which were dominated by self-castigation. Too often the tenor of such meetings has been that we are a persecuted group. Prehistoric man, according to history, felt that all illnesses and evils resulted from spells cast by individuals or groups or devils on the afflicted person. Similarly, the medical profession has taken the attitude that most groups are casting a spell on us.

The Disease of Socialism

It is high time that we realized that our present-day civilization is afflicted with a very serious disease—the disease of socialism. This disease, as we all know, is not limited to the medical profession, but is a generalized affliction. In the past the medical profession has met successfully the challenge of many diseases—to wit: scarlet fever and typhoid fever, and in more modern times, pneumonia, mastoiditis, and diabetes. Tuberculosis can now be successfully combated in most cases. We have even more recently found the answer to the problem of polio, and it is not unreasonable to believe that within the comparatively near future we will be able successfully to control, if not combat, the dread condition of cancer.

Is it then too much to believe that we are capable of combatting an even more dread disease, so far as medicine is concerned—that of medical socialism? Social-

ism cannot be wiped out by the medical profession alone. That is agreed. But we can contribute greatly towards its eradication. The eradication of these other diseases which have been mentioned has not been accomplished by crying "wolf" or stating that a curse has been placed upon the individuals afflicted. It has been done by constructive and scientific opposition. The same approach can and must be used against medical socialism.

Primitive Methods of Treatment

In primitive man, disease was invariably viewed as the result of a malevolent influence exercised by a god, supernatural beings, or other human beings, dead or alive. According to this view, disease was caused by the evil influence of an enemy, a demon, a god, or an animal; and it accordingly was treated by means calculated to dislodge the cause from the body of the patient. The treatment in those days was carried out by a medicine man, who proceeded to extract the evil influence from the body. Today, unfortunately, we have no such medicine man to cure socialism and the evils of medicine.

Another method of treating injuries or diseases in those ancient days was to deal with the soul of the patient, persuading or forcing the evil spirit to depart from the body rather than approaching the disease scientifically. Is it not true that with regard to the affliction of socialism we are trying to force or persuade the evil spirit to depart from the body rather than approaching it scientifically and curing it at its source?

Another curious and ancient method of treating disease was to transfer the disease from the patient to another individual, or even to an animal or a plant. There seems to be no such solution for medical socialism. The other professions will not accept it any more than we will; and to date, we have been unable to find an animal or a plant stupid enough to allow it to be transferred.

Seeking a Cure

There is, and must be, a cure for any disease, regardless of how malignant. A Moslem prophet wrote: "O servant of God, use medicine, because God has not created a pain without a remedy for it." There is a remedy for medical socialism, but it just has not been found. We tend to say and at times believe that it cannot be found. Sir

William Gull, in the late nineteenth century, is quoted as saying: "'Cannot' is a word for the idle and self-satisfied. It is inadmissible in science." Rather than say "cannot" we should be strong in our belief in our individual rights and abilities. We should accept the statement of Paracelsus: "That man, no other man shall own, who to himself belongs alone."

Personally I cannot see the reason for the extreme pessimism observed in some areas and for the attitude that everyone is against us. The past year has led me to believe that rather than pessimism we should be filled with optimism. I am just naive enough to believe in the integrity of this great nation of ours and to believe that although socialism is a possible disaster, it cannot predominate in this country in the future. I am a firm believer in the precept that this nation and our resulting social structure were founded on the belief in the freedom of man and the freedom of private enterprise. We cannot conscientiously accept any other precept without accepting the ultimate thought of self-destruction.

We are not a defeated group, but a besieged group. We as medical men, have often been accused of smugness and complacency. Smugness, no; complacency, yes—the complacency of an individual well satisfied with his performance of the job that he was created for, that of taking care of the sick; complacent or secure in this wobbly social structure, no. Rather than complacent, the doctor of the present day is more frequently accused of being too quick on the trigger, too quick to anger, too quick to rise up against the things which may be for the public benefit but which might infringe on his own personal rights.

We cannot take a defeatist attitude. Rather, we should hold high our torch and continue on our lighted path with optimism and confidence. If I might quote an anonymous writer: "Hold high the torch, you did not light its glow; 'twas given you be other hands, you know."

In answer to Dr. Murphy's most brilliant address of last year, we have a great ship. It has many small leaks. But it is not a sinking ship. It is a ship which is sailing into battle with flags unfurled, and with many hands working hard below deck to stop the small leaks.

The Interprofessional Code of North Carolina for Attorneys and Physicians

THEODORE S. RAIFORD, M.D.

ASHEVILLE

An excellent critique of the Interprofessional Code approved last year by the Medical Society of the State of North Carolina and the North Carolina Bar Association was published in the December issue of the NORTH CAROLINA MEDICAL JOURNAL⁽¹⁾. In this paper Mr. W. L. Thorpe, attorney of Rocky Mount, explained the implications of the Code and gave a lucid discussion of the less known aspects of our judiciary system as it affects personal injury litigation. He pointed out shortcomings in the dealings of members of his profession with the medical profession and showed how the Code can lead to a better understanding of mutual problems. The purpose of this discussion is to bring out the problems which we as physicians encounter in dealing with personal injury cases, to admit our own fallacies, and to show how the proper application of the Code can rectify some of these faults and lead to a better working relationship between the two groups.

The Need for a Code

It is no secret that a so-called "armed truce" has existed between attorneys and physicians, one trying to obtain the benefits of medical assistance in litigation, the other seeking to avoid the entanglements of court procedure. It was a distinct surprise to physicians, however, to find the legal group just as eager to remedy this situation as they were, and this impression has been further strengthened by the reception of the Code since its institution.

The initial approach to the problem by the Medico-Legal Liaison Committee consisted of a frank discussion by each section of their criticisms of the opposite profession. Mr. Thorpe has accurately enumerated the shortcomings of the legal profession as follows:

1. Failure to study the medical problem involved in order to assist the doctor in presenting his testimony
2. Failure to discuss the case fully with the doctor before trial
3. Failure to make suitable arrangements

for the client to pay the doctor for his time and services

4. Failure to arrange for a doctor to be permitted to testify as soon as possible upon arriving at court
5. Failure to advise doctors sufficiently in advance as to when it would be necessary to come to court
6. Failure to consult the treating physician before arranging for a specialist to examine the client
7. Failure to prepare the doctor for cross-examination
8. Failure to convince the doctor by word and deed that the attorney is interested only in presenting the true facts to the court and jury.

The legal section in turn outlined the following criticisms of the medical profession:

1. Failure to accept a case for examination and evaluation for fear of becoming involved in legal procedure
2. Failure to submit a prompt and comprehensive report when asked to do so
3. Failure to appear in court promptly when requested
4. Failure to bring medical records to court
5. Failure of the witness to prepare himself adequately on the case about which he is to be questioned
6. Deliberately evasive tactics to avoid court appearance
7. A general lack of cooperation with attorneys in all matters pertaining to litigation
8. Failure of doctors to testify in an objective manner without bias and prejudice
9. Failure of doctors to confine testimony to questions propounded.

Few of us can deny having been guilty of at least some of these defections. With these faults set down, the committee then set about to devise a working plan for overcoming them as far as possible.

The rising accident rate is reflected in the increase in personal injury cases, and especially in those which subsequently come

to litigation. It has been estimated that approximately 75 per cent of cases now pending in court involve personal injury, and in these cases 75 per cent of the attorney's work either directly or indirectly concerns the medical aspects of the case. It is therefore obvious that more and more of the attorneys' work demands the assistance of the medical profession; and by the same token, more of the physicians' work involves personal injury cases which may eventually be concerned with litigation. Few doctors appreciate the important role of the medical profession in these cases. The physician is the only witness whose testimony can establish a causal relationship between injury and accident, and who can testify with respect to essential evidence such as x-rays, subjective symptoms, objective findings, examination, diagnosis and prognosis. It therefore become imperative to devise some means of facilitating court procedure. The Interprofessional Code is an attempt to overcome some of the above mentioned difficulties by promoting better cooperation between the two professions.

History

The idea of an Interprofessional Code is not new. In 1952 the Cincinnati Bar Association and the Academy of Medicine of the same city combined to set forth a working agreement for lawyers and doctors in dealing with cases in this category. This effort proved so successful that in 1955 similar codes were adopted by the states of Utah, Oregon and Wisconsin, and by individual counties in Arizona, Iowa, Ohio, and Oklahoma. These came to the attention of Dr. J. P. Rousseau, then president of the North Carolina Medical Society. In an address before the North Carolina Bar Association in the same year he appealed to that group for cooperation in the adoption of a similar code in this state. As a result, the joint Medico-Legal Liaison Committee was appointed. The fruit of their efforts is the Interprofessional Code of North Carolina, for physicians and attorneys.

This code is not entirely original with us. It embodies the basic principles of the Cincinnati Code, with certain modifications for its adoption in this state. It is an outline, not a textbook, and for purposes of simplicity, many details and explanations are omitted. It does not constitute legislation.

It is nothing more than a gentleman's agreement which, if followed, will promote more harmonious relations between the two professions in their dealings with each other.

Preamble

The Code is divided into four sections. Section A constitutes the preamble and is self-explanatory. It simply states the purpose of the Code and sets forth the agreement made by attorneys and physicians. Its core bears repetition; namely, the acknowledgement that "a substantial part of the practice of law and medicine is concerned with the problems of persons who are in need of the combined services of a lawyer and doctor; that the public interest and individual problems in these circumstances are best served only as a result of cooperative efforts of all concerned; that members of both the legal and medical professions share an obligation to the individual and to society."

Medical Reports

Section B concerns medical reports in preparation of cases for litigation. Since the major function of litigation in cases of personal injury is the recovery of damages to compensate for actual medical expense, loss of time from gainful occupation, loss of earning capacity, and emotional trauma, it is quite obvious that no jury can award proper restitution without knowing the extent of these factors. Medical reports, therefore, comprise an integral part of the court procedure and become a most important part of the attorney's preparation of the case for hearing.

The attorney representing the litigant usually arranges for the examination and requests the report as the most important part of his preparation of the case. He may require only a brief statement of the diagnosis and the treatment rendered by the attending physician, or he may need a complete examination by a disinterested physician, with a comprehensive evaluation of the disability and prognosis, and recommendations for further treatment. The attorney can materially aid the physician and insure a more satisfactory report by giving as much advance notice as possible and stating specifically the information desired. Inasmuch as any such report constitutes information of a confidential nature, the attorney should obtain the proper

authorization from the patient-client for the release of this information. The physician should in turn realize the possible pitfalls in the release of this information and protect himself against possible re-crimination by insisting not only on proper authorization, but on specification as to whom it is to be released. Many insurance companies use this type of permit, which can be easily included with the written request for the report.

The physician, upon receipt of the properly executed request, should realize its importance and submit it as promptly as possible. He should endeavor to cover all points specified in a comprehensive manner, at the same time avoiding verbosity and keeping complex medical terminology to a minimum. He should realize that his medical reports may be brought to the attention of lawyers, adjusters, claim supervisors, insurance company doctors, and even medical experts. His report can therefore become a yardstick of his carefulness, knowledge, and thoroughness, and his professional reputation can be directly affected thereby. While the preparation of such a report may appear to be onerous, it should be realized that it is frequently instrumental in bringing about a settlement out of court to the mutual satisfaction of both parties and the necessity of court appearance as an expert witness is thereby eliminated.

Medical Testimony

Section C deals with medical testimony and is roughly divided into three parts: (1) the pre-trial conference; (2) the mechanics of producing the medical witness; (3) The proper presentation of expert medical testimony.

The pre-trial conference

If the Code accomplishes no more than convincing the attorney and physician of the advantages of the pre-trial conference it will have been worth while. One of the greatest sources of discontent among potential medical witnesses is the eleventh hour summons to a physician to testify in a case for which he is totally unprepared, and with which he is not allowed time to familiarize himself or to arrange his professional appointments so as to avoid undue hardship. Conversely there is nothing more frustrating and unsatisfactory from the lawyer's point of view than for a medical

witness to be unable to appear at the most advantageous time (for reasons which constitute legal excuse), and when he does appear, to be poorly prepared and either unable or unwilling to give more than equivocal and inconclusive answers to questions propounded. The pre-trial conference seeks to avoid these difficulties by providing an opportunity for the attorney and physician to review the pertinent aspects of the case in question well in advance of the actual court appearance.

The conference may in some instances be only a short telephone conversation, or in more complicated cases require a lengthy discussion of all facets of the case in question. It should cover the following points as a minimum: (a) the place and expected time of appearance; (b) the purpose of the litigation and the specific medical implications; (c) the specific questions the physician will be asked on direct examination; (d) the *probable* questions he will be asked on cross-examination; (e) explanation by the physician of the context of his report and elaboration of the important medical features to be emphasized in the attorney's examination; (f) points to be emphasized in qualification of the witness; (g) arrangement of compensation for services. If these points are adequately covered, medical testimony ceases to be a harassing chore and becomes a medical duty no more distasteful than other professional obligations. The attorney is more aware of the time element involved and the progress of the case and is therefore the logical party to arrange the conference at a time and place mutually convenient to both.

Producing the witness

The most common means of summoning the medical witness is the subpoena. In many instances the physician's first warning of his expected court appearance is a subpoena by telephone, not infrequently on the day before the trial. This means of issuance, while binding in some states and acceptable in others, is all too frequently accepted by a secretary and supplies nothing more than the date of the hearing and the names of the litigants. Since the patient involved may have been last seen by the physician months or even years before, and then possibly only once, the doctor is hard put to identify the patient, familiarize himself with the case, and intelligently prepare

his testimony. He does not know what attorney caused him to be subpoenaed, and the only means he has of finding out is by getting in contact with the presiding officer, in itself a difficult or impossible task. Yet he must appear at the stated time and place or risk being held in contempt of court. All too frequently he complies, cancelling elective surgery or office appointments, only to find on arrival in court that the case has been either settled or postponed. Small wonder then that the physician becomes a disgruntled and often a hostile witness.

This naturally leads to the question "Why is a subpoena necessary?" From the standpoint of the attorney the subpoena is a necessary and extremely useful instrument. It accomplishes two important objectives: (a) It enables the attorney to request and obtain continuance of the case if the medical witness is unable to appear for reasons constituting legal excuse; (b) it protects the physician by preventing him from becoming a voluntary witness, thereby subject to the stigma and accusation of bias and partiality. The subpoena must therefore be regarded as a necessary instrument, the nuisance of which can be largely averted by the pre-trial conference held prior to its issuance.

The physician may logically question the necessity of court appearance after he has prepared a comprehensive report. It should be pointed out, however, that the adversary system under which courts of law operate permit a witness' testimony to be examined or questioned regardless of the form in which it is submitted. Testimony by deposition, however, is a different matter. This is employed in instances where, in the opinion of the legal participants, the appearance of the witness in court is either impossible or inexpedient. In such a case the testimony is given under oath, questioned by the opposing attorneys, and duly recorded. It is then offered as evidence at the actual trial.

The inconvenience and expense of appearing in court unnecessarily—that is, when the case has been postponed or otherwise disposed of—the so-called "false appearance," can be and indeed is easily averted by the vast majority of conscientious attorneys. It involves simply keeping the physician informed as to the developments of the case.

The attorneys instruct the physician to disregard the stated time of appearance on the subpoena, tell him when he will probably be needed, and when he does appear, arrange for him to testify as early and as quickly as possible so as to cause him minimal inconvenience. With such cooperation, doctors should realize that in the presentation of testimony timing is all important, and should cooperate to the best of their ability in making themselves available and accessible when needed.

Presenting the testimony

The presentation of medical testimony has many facets, and both attorneys and physicians would do well to familiarize themselves with it, bearing in mind at all times that the purpose of the hearing is to obtain an honest evaluation of injuries and other losses, and fair and proper restitution by the responsible parties.

The conduct of the physician on the witness stand is, in itself, subject matter for an entire paper. Davidson has recently published an article entitled "The Care and Feeding of Medical Witnesses," and Liebenson devotes a large part of his book "The Doctor in Personal Injury Cases" to this subject. Although it can be considered only briefly at this time, certain salient points should be emphasized. The physician should at all times maintain the dignity of his profession. He should never lose his temper, no matter what the provocation. When this occurs, his judgment is impaired and his testimony loses its effectiveness and is discredited by the jury. Accordingly the true merits of the case may be lost, the attorney and the client suffer, and the physician's reputation is harmed. He should remember that his is not the role of advocate. His sole function is to convey to the jury in an honest and unbiased manner his opinion of the medical aspects of the case under trial.

It is easy for the medical witness, either through a careless force of habit or sometimes through regrettable exhibitionistic tendencies, to indulge in verbose descriptions couched in complex medical terminology meaning little or nothing to a lay jury. He should consider carefully the questions submitted and phrase his answers as concisely and objectively as possible, using terminology which is understood by laymen. One of the most common sources of

confusion and contradiction of a medical witness is his own inadvertent attempts to be helpful or to avoid a seeming show of ignorance by long rambling answers. This may easily lead him to make conjectures, propound theories, or volunteer information beyond that requested, or even attempt to bluff. There is no surer way to difficulty and embarrassment on the witness stand, for this leaves him completely at the mercy of the astute cross-examiner. If he does not know the answer, he should say so frankly and without hesitation. If he does know the answer — and he should after an adequate pre-trial conference—he should give it in the simplest manner possible, using only necessary modifications. If he is asked a question requiring a yes or no answer and feels that such an answer will not convey the full import of his meaning, he must answer yes or no but has the right to explain his answer. Finally, under no circumstances should he permit personal prejudice, favoritism, or personal gain to influence his testimony. If he does, a shrewd attorney in cross-examination can bring this to light with damaging effects upon his character and veracity.

In examining the witness the attorney should likewise be guided by principles of conduct befitting the dignity of his vocation. Statement of qualification of a medical witness as an expert can go far to impress the jury with his competence. Too often this information is passed over lightly and accepted as a matter of fact, when it could be used to make the witness of infinitely more value to the client in whose behalf he is testifying.

In the long history of our judiciary system certain unscrupulous attorneys have formed the custom of badgering, browbeating, and embarrassing the witness on cross-examination. This practice is undoubtedly designed to discredit the witness by inciting him to emotional demonstration, loss of temper, confusion, and contradiction. More than any other factor it is responsible for the physician's reluctance to appear on the witness stand. Fortunately this deplorable custom is not common, and is avoided by the majority of conscientious attorneys. When it does occur, however, the witness is well within his rights in requesting protection from the presiding officer. On the other hand it is the attorney's accepted

privilege in cross-examination to confuse the witness, if possible, in an attempt to shake his testimony. If, however, the witness adheres to the simple principles outlined in the previous paragraph, he has nothing to fear.

The attorney can obtain far more valuable and helpful testimony if his questions are phrased in a simple and forthright manner. Complex and confusing questions lead to complex and confusing answers. By the same token, no witness should attempt to answer a question which he does not understand clearly. If he does not understand all of the implications of a long and complicated question, he should ask that it be repeated or even submitted in writing in order to study it before answering. Finally, if the attorney bears in mind the demands of the physician's professional obligations and minimizes as far as possible his time spent in court, he in turn will receive far better cooperation from the physician.

Compensation

For pre-trial services

Section D concerns compensation for services in connection with litigation. It is recognized that the physician may logically expect and demand compensation for any services rendered prior to the actual court appearance, including conferences, examinations, and medical reports. This can be arranged with the attorney when the latter first requests the service, in such manner and amount as may be mutually acceptable to the attorney, the physician, and the patient-client. The agreement may be written, if preferred, or verbal, if a satisfactory working relationship has been established. There being no set fee for this type of service, it is usually a matter of individual discretion. Many physicians regard minor services, such as a short telephone conversation or simple medical report, as part of their service to the patient and gladly supply them without charge, as they would supply the same information to another physician. When a re-examination or a comprehensive report embodying opinions about prognosis, further treatment and disability is required, or when it is necessary to review hospital records, medical literature, and so forth, it is just and proper that the physician make a charge commensurate with the time and

skill expended. The exception arises, however, when the client is known to be destitute and cannot guarantee remuneration. Then the physician should regard his services in the same light as he would medical treatment of an indigent patient and waive any specified compensation pending the outcome of the hearing.

For testimony

Compensation for testifying, however, falls into a different category. Whereas it is proper for an attorney to represent a client on a contingent fee basis, this does not apply to the physician, since it would immediately place him in the category of a prejudiced witness. The attorney may make up in a successful case what he fails to recover in an unsuccessful one. The physician, on the other hand, may recover in a successful case a fee commensurate with the time and skill expended, but on a less favorable case he may recover nothing. As yet there is no satisfactory solution to this problem but a start has been made which is infinitely more satisfactory than the hit-or-miss method used heretofore. According to North Carolina law the presiding officer sets the fee for expert testimony. Since the medical witness is present at the request of the court, the attorney who causes the subpoena to be issued cannot be held legally responsible for this fee. The Code provides that the attorney responsible for placing a witness under subpoena shall take such action as may be required by the law of the forum involved, requesting the court to allow compensation for his services. This simply means that at the conclusion of the hearing the attorney calls to the attention of the judge the witnesses who have appeared at his request and ask that just and fair compensation for their services as expert witnesses, if so qualified, be written into the court costs. Any unpaid bills for medical services rendered before the hearing can be handled in like manner. This is the most that any attorney can be expected to do, but if he does this, the witness will know that his interests are being guarded. It is of course within the power of the attorney and his client to agree that a fixed amount be paid the physician for his appearance, or even to pay this amount in advance. This is not without hazard, however, since it may be brought out in cross-examination to the client's detriment.

Fees for expert testimony follow no fixed schedule but are customarily set at the discretion of the judge. They do not necessarily reflect the true value of the time, professional knowledge, or skill expended. With better publicization of the code and with the help of the attorneys, however, it is hoped that in the future courts will allow fees more nearly commensurate with the value of the physician's services.

Institution of the Code

There now remains the important problem of introducing the Code and familiarizing every member of each professional group with it. Inasmuch as it does not constitute legislation and is useful only as it is accepted voluntarily, it must be accepted and applied by each local county or city group, subject to their particular modifications. Customs vary in different localities; hence it cannot be applied throughout the state in the same manner. The committee offers it to be adopted and used by each group as it sees fit. It is suggested that each county society meet with the local bar society for the purpose of discussing the Code and its implications and the problems of each group. An added incentive for such a meeting is the A.M.A. motion picture, "The Medical Witness," portraying the right and wrong ways of obtaining and presenting medical testimony. In addition, the members of the joint committee are widely scattered throughout the state and stand ready to assist in any such program in any way possible.

Education in Court Procedure

The deliberations of the joint committee have brought out several items which it feels should receive greater consideration. One of these is the education of medical students in court procedure and their obligations and rights as participants. The majority of medical schools now include in their curricula courses in medical jurisprudence. These courses vary from a few short lectures to a detailed course in forensic medicine. In a few instances correlated courses between schools of law and medicine are being worked out whereby medical students are invited to observe or even participate in legal exercises and legal students are invited to attend lectures on toxicology, pathology, autopsies, and other phases of medicine which will be of help to them in their future practice of law. This is a healthy practice and one which is to be

commended. Where such practical training has not been available, certain local groups have instituted an indoctrination course in medico-legal technique designed primarily for younger physicians starting in practice. They have proved so successful that older physicians are also participating. The committee is recommending to the three medical schools of this state that a standardized course in medical jurisprudence, including specific instruction in courtroom procedure, be incorporated into their curricula. It furthermore feels that the Code should be carefully explained to each graduating medical student and that copies be given to each graduate and to each physician receiving license to practice in this state.

Impartial Medical Testimony

In an effort to decrease the number of personal injury cases on the court calendars, the City of New York for the past two years has attempted a relatively simple experiment which has proved amazingly successful and bids fair to establish a precedent for other localities. It is called the "Medical Expert Testimony Project." With the assistance of the County Medical Society and the New York Academy of Medicine, a panel of highly qualified specialists was selected. The courts then set up a Medical Reports Office under the supervision of a deputy clerk of the Supreme Court. It functions in the following manner. The judge reviews the case with attorneys representing plaintiff and defendant, having access to any medical reports on the case at that time. He attempts a conciliatory settlement at this time. If there is too great a discrepancy between the claim and the offer and there seems to be no way to reach an amicable settlement, he refers the case to the Medical Reports Office. This office then arranges for an examination and evaluation of the case by a member or members of the panel, choosing men from the appropriate specialty or specialties in rotation. The physician then conducts an independent examination of the client, reviews pertinent medical reports or hospital records, and submits his findings to the Medical Reports Office with copies for each

lawyer. The judge then reviews the case with the lawyers in the light of the impartial medical report and again attempts a settlement.

The effectiveness of the procedure is best measured by the results obtained in the first two years of the experiment. Of 238 cases referred to impartial experts, 120 were settled in the pre-trial conference. Of 54 others which have been settled, 36 were settled before trial. While these were not settled in the pre-trial conference, the impartial testimony was felt to have a direct bearing on the satisfactory settlement. Only eighteen cases actually went to trial for settlement. The remaining 64 cases are still pending, and it is felt that a large percentage of these will be settled before coming to trial.

Thus far the experiment appears to have been successful, and the most enthusiastic participants are the judges who see in it a fair satisfactory means of reducing the court congestion. The one objection is the cost involved in setting up the project. In New York the costs were defrayed by two private grants totalling \$40,000. Once the effectiveness of the procedure is proved, however, state or county funds will probably be made available since the ultimate saving in court costs will far outweigh the expenditure involved. It is an interesting experiment and one which may possibly be adapted to our needs at some time in the future.

Summary

Through the efforts of a joint committee from the legal and medical professions, a practical working agreement for lawyers and doctors known as The Interprofessional Code of North Carolina has been formulated. The Code, in the interest of simplicity, contains only fundamental precepts, and an attempt has been made in this presentation to explain in more detail some of its implications. Based on experience elsewhere, the Code, if accepted and used, will contribute materially to a better understanding and cooperation between attorneys and physicians and lessen the burden of litigation in cases of personal injury.

Strongyloidiasis With Probable Cardiac Involvement

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Strongyloidiasis is usually a mild disease, but a generalized hyperinfection with *Strongyloides stercoralis* may produce a severe illness of varied manifestations. This paper reports a severe infection with this parasite as the factor causing acidosis in a previously well controlled diabetic individual. Of considerable interest were the electrocardiographic changes that occurred in the course of the disease, presumably indicating that the heart, the pericardium, or both were involved in the generalized infection.

Case Report

A 25 year old white farmer, was admitted to Watts Hospital on August 11, 1950 in stuporous diabetic acidosis. He was known to have had diabetes for two years and had been adequately controlled on 35 units of protamine zinc insulin daily. Two weeks before entry he had an upper respiratory infection with fever, dyspnea, a nonproductive cough, and generalized muscular pains. When seen by his family doctor, he was told he had pneumonia and was given injections of penicillin, apparently without improvement. When edema of the eyelids occurred along with signs of acidosis, he was hospitalized. He had lived on a farm in North Carolina all his life except for three years of military service, limited to the continental United States, during World War II.

Physical examination on admission showed a well nourished young man who was drowsy but well orientated. There was moderate conjunctival injection, with slight edema of the eyelids. Breath sounds over both lung fields were normal on auscultation. The heart was normal in size, and neither murmur nor friction rub was heard. The blood pressure was 130 systolic, 70 diastolic. The remaining physical examination was not remarkable.

On admission the blood sugar was 400 mg. per 100 cc., and the carbon dioxide combining power was 32 volumes per cent. The Benedict urine test was 4 plus for sugar, the acetone test was likewise strongly positive, but the diacetic reaction was negative. The diabetic acidosis was adequately controlled within 12 hours, but the diabetes was difficult to regulate until after he had received specific therapy as outlined.

S. stercoralis larvae were found in the urine on the day after entry, but repeated stool specimens were negative for the parasite; however,

neither purgation nor duodenal fluid aspiration was performed. The white blood cell count on entry was 12,800 per cubic millimeter, of which 48 per cent were eosinophilic leukocytes; six days later the count was 19,650 per cubic millimeter, with 44 per cent eosinophils. A roentgenogram of the chest on August 12, 1950, showed very fine nodular densities throughout both lung fields. The heart was normal in size, shape, and position.

An electrocardiogram made on August 12, 1950, the day after entry, when the patient was completely free of acidosis, showed the T waves to be flat in lead I, diphasic in leads II and III, and deeply inverted in leads CF-2, CF-4, and CF-5 (see fig. 1, first vertical column).

His hospital course was febrile, with the highest temperature elevation of 102 F. occurring on the fourth day, accompanied by expected tachycardia. On the fifth day the patient was started on gentian violet, one 65 mg. enteric coated tablet three times daily with meals. The response to this drug was dramatic. The temperature fell to normal in two days, and his general condition improved markedly. The diabetes then became easily controlled. He was discharged from the hospital on a mixture of 30 units protamine zinc insulin and 20 units regular insulin, and the prescribed dose of gentian violet until he had taken a total amount of 3.3 Gm.

When next seen on October 7, 1950, he had no complaints, having been working on his farm as usual. The physical examination was not remarkable. A repeat electrocardiogram showed the T waves now to be upright except in leads III and CF-2 (see fig. 1, middle vertical column). A urinalysis and a specimen of stool from the rectal glove were negative for *S. stercoralis*. Chest roentgenogram still demonstrated the same small densities throughout the lung fields.

Attempts to follow this patient were futile and he was not seen again until the night of September 30, 1951, when he was admitted to the hospital in insulin shock. This condition quickly responded to intravenous glucose. On this admission the white blood cell count was 12,150 cubic per millimeter, with only 1 per cent eosinophils. Stools and urine were repeatedly negative for *S. stercoralis*. Roentgen studies of the chest again demonstrated the fine fibrous densities. The heart remained normal in size and shape. The electrocardiogram was normal, with tall T waves in all limb leads and V-1 through V-6 precordial leads (see fig. 1, last vertical column). He was regulated on 50 units NPH insulin and discharged in good health.

This patient was not seen again until September,

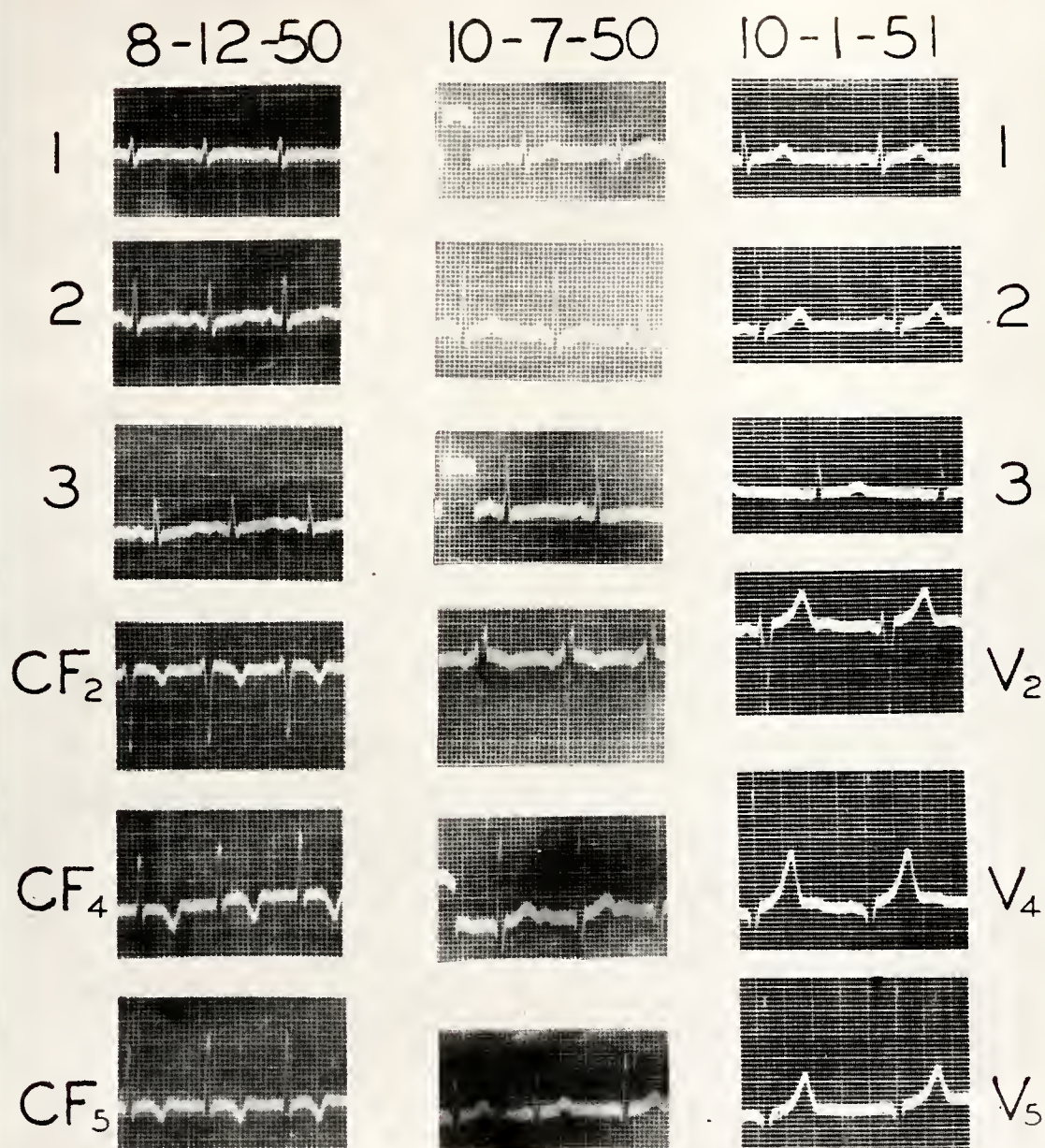


Fig. 1. Electrocardiograms showing T wave changes due probably to *Strongyloides stercoralis* infestation.

1956, at which time he was unable to regulate his diabetes. He had had no further manifestations of strongyloidiasis nor any other illness since he was last seen five years previously. A general physical examination showed only the uncontrolled diabetes, which was later regulated on 65 units NPH insulin. The electrocardiogram, including the augmented leads with the conventional limb and

precordial leads, was normal. The T waves were upright and of good amplitude in all leads. The chest x-ray showed the fine nodules to persist throughout the lung fields.

Incidence and Modes of Infection

Since a thorough study of this disease has been made by Faust⁽¹⁾, Jones⁽²⁾, and Kyle and his associates⁽³⁾, only the more

significant features will be reviewed briefly. The incidence of strongyloidiasis in the southern part of the United States is essentially the same as for hookworm, varying from 1 to 5 per cent of the population. The morphology of the parasite likewise resembles that of the hookworm. The distinguishing features of the rhabditiform larvae are the short buccal opening, the doubled-bulb esophagus, and the genital anlage located in the middle of its body. The notched tail identifies the filariform larvae. One important characteristic is the ability to persist in the host for long periods. Bodon⁽⁴⁾ reports a case of 20 years' duration, and Palmer⁽⁵⁾ one of 30 years' duration. As with the hookworm, the most frequent means of infection is by penetration of the skin of the host. Ingestion of infected material and direct contact with infected persons are other modes of host infection.

Pathology

After penetrating the skin and upon reaching the capillaries of the lung via the returning venous blood, the larvae produce hemorrhages and exudates into the alveolar spaces. This process may be mild, producing bronchitis, or extensive enough to cause pneumonia and death. Death in Kyle's⁽³⁾ case was attributed primarily to pulmonary hemorrhage and edema. The larvae then migrate to the trachea, to the esophagus, into the gastrointestinal tract, where the adult females attach themselves to the duodenal and jejunal mucosa, and occasionally into the stomach, ileum and colon.

Larvae have also been found in the gallbladder, mesentery, liver, pericardium, and heart. Blacklock and Adler⁽⁶⁾ found larvae in the pericardium of a chimpanzee which had died of an overwhelming infestation. In Kyle's⁽³⁾ case larvae were also present in the myocardium. There was an infiltration of small lymphocytes around the larvae without apparent injury to the cardiac muscle fibers. Kyle could not find a previously reported instance of similar cardiac involvement. Although the larvae are found frequently in the urine, the parasites have not been demonstrated histologically in the human kidney. In 1949 Redewill⁽⁷⁾ reported for the first time involvement of the lower urinary tract and genitals in the female and the external genitalia in the male.

Symptoms

The foregoing brief review of the parasite's wanderings helps to explain the following symptoms of the disease. Within 24 hours after penetration of the skin there usually occurs an erythematous pruritus similar to that seen in the "ground itch" of hookworm. Jones⁽²⁾ stated that cutaneous lesions, including urticaria, occurred in 22 per cent of his series of 100 cases. Within the next day or two the larvae reach the lungs, often producing bronchitis, pulmonary edema, hemorrhage, and pneumonitis, depending on the severity of the infestation. In Jones'⁽²⁾ series of 100 patients, pneumonitis was demonstrated by x-ray examination in 11.

Gastrointestinal symptoms vary, but severe disturbances do occur; colicky abdominal pains that are usually generalized; mild to marked diarrhea with stools that may be grossly bloody in character; alternating constipation; nausea and vomiting; and vague symptoms of gaseous distention and jaundice, indicating involvement of the liver and biliary tract. Jones⁽²⁾ stated that 27 per cent of his patients showed a "duodenitis" on barium examination. Fever is a frequent sign that may be due to the secondary bacterial invasion or may well be part of the tissue reaction to the parasitic infestation.

Eosinophilia has been stressed by Hinman⁽⁸⁾, but Faust⁽¹⁾ has not found it to be a constant finding. Faust stated that the eosinophil level is highest in the early infection, with a rapid decline as the disease becomes chronic. In patients who have severe symptoms or actually die (as in Lyle's case⁽³⁾, which came to postmortem), the eosinophils are usually few or entirely absent in the peripheral blood. It is Willard's⁽⁹⁾ observation that eosinophilia is not a reliable guide to the presence or absence of intestinal parasites and is not indicative of the type of parasite present.

S. stercoralis ova are rarely seen in the stool, except after severe purging or during a bout of diarrhea. The zinc sulfate floatation method is said to be the best means of demonstrating the larvae in the stool. Larvae may also be found in the urine and in gastric and duodenal washings. They have even been demonstrated in sputum and pleural exudate. Jones and Abadie⁽¹⁰⁾ stress the fact that *S. stercoralis* larvae

may be identified in the duodenal fluid when they are not demonstrable in the feces of infected persons. He termed the duodenal tube method the more efficient diagnostic procedure, since more diagnoses (77 per cent) were made after a single aspiration than after 10 stool examinations. The reason for the higher yield of positive findings by the duodenal method is that the newly hatched *S. stercoralis* larvae first reach the intestinal tract in this locality and thus are probably more concentrated here.

Strongyloides precipitin and skin tests may prove a valuable aid in diagnosis. Brannon and Faust⁽¹¹⁾ have produced a test antigen prepared from filariform larvae cultured from feces of the infected chimpanzee. Dilutions of 1:100 produced 23 positive intradermal reactions and 25 positive precipitin tests in 25 chronic cases of human strongyloidiasis. The precipitin titer ranged from 1:5000 to 1:30,000. It is not known how long after cure the intradermal test will remain positive, although the precipitin test indicates the presence of specific antibodies.

Treatment

Treatment of this disease has not been very satisfactory. Since Faust introduced the oral use of gentian violet⁽¹⁾ in 1929, this has remained the drug of choice. Jung and Faust^(11a) now believe a four-day course of the drug is most effective. On the first day 60 mg. or 1 grain of gentian violet is given three times daily one hour before meals, increasing the dose by 30 mg. each day so that on the fourth day the patient receives 150 mg. three times. If vomiting occurs, the medication is temporarily discontinued. The major disadvantage to this method is the failure of the drug to be absorbed from the intestinal tract. The enterally administered dye does not reach the organism at the stages when it does the most harm—that is, the migrating larvae of the initial infection and auto—and hyperinfective stages. Because of this fact Palmer⁽¹²⁾ injected 20 milliliters of a 0.5 per cent solution intravenously daily for 20 days without untoward effects. He treated 45 cases, curing 41 by one course of treatment. The remaining 4 were said to be cured by a second course. Palmer⁽⁵⁾ also reported use of intravenous medication in a patient in whom oral use was ineffective. Later the

patient died of tuberculosis and at postmortem no evidence was found of the parasite. Administration of 1 per cent solution of gentian violet (25 cc.) by gastric tube cured Engle's⁽¹³⁾ patient in whom the infection was unaffected by oral medication. Willard⁽⁹⁾ also found that intraduodenal instillation of 1 per cent solution may succeed when oral medication fails.

Simpson⁽¹⁴⁾ advised compound tincture of iodine given by duodenal tube as an effective drug, but its use has not yet become general. Chesterman⁽¹⁵⁾ has critically evaluated the many drugs that have been used at one time or another with little, if any, success. These include thymol, hexylresorcinol, santonin, tartar emetic, tetrachlorethylene, sodium antimony tartrate, emetine, niloden and Hetrazan. Chernin⁽¹⁶⁾ used Hetrazan (Burroughs-Wellcome) in 7 cases, but in only 2 cases were the stools free of larvae after treatment. Also toxic symptoms were high with this drug. These findings are in keeping with those of Torres⁽¹⁷⁾, who reported a cure in only 1 of 12 cases in Puerto Rico.

The most recent drug to be used in an attempt to eradicate the parasite is Win 5047 (Mantomide by Winthrop-Stearnes). A group of 27 patients who had shown no response to gentian violet were given this drug by McHardy and others⁽¹⁸⁾. In 14 patients the parasites persisted, in 7 the infection recurred after transitory absences, and in 6 there were no demonstrable recurrences. The drug in doses of 1 Gm., given four times a day for 20 days, had no apparent side-effects. This drug may prove to be of some benefit in gentian violet resistant cases.

Comment

In the case described the disease had its clinical onset as a severe upper respiratory infection in a patient who had diabetes. When signs of pneumonia developed, he was given penicillin. The response was poor, the infection progressed, and he was seen in a state of diabetic acidosis. The diabetes was difficult to regulate until after gentian violet therapy was begun and he became afebrile. His pulmonary involvement was diffuse, being described roentgenographically as fine nodular densities throughout both lung fields. Repeated films one and six years later showed persistence of these tiny nodular densities. Clinically

the lungs were normal on auscultation and percussion.

Of much interest were the changes in the electrocardiogram. First, it should be stated that these changes may have been influenced by possible low blood potassium accompanying the moderate acidosis that was present. It is noted, however, that the first tracing was taken on the afternoon of the day after entry, at which time the patient was out of acidosis. Also there was a normal QT time, prolongation of which is one of the earlier electrocardiographic signs of hypokalemia. At that time (1950) facilities for determining blood potassium levels were not available in the hospital laboratory.

The electrocardiogram (fig. 1) taken the day after entry (August 12, 1950) was abnormal in that the T waves were isoelectric in Lead-I, diphasic in Leads II and III, and deeply inverted in Leads CF-2, CF-4, and CF-5. Repeated record two months later showed the T waves upright in Leads I, II, CF-4, and CF-5. A year later, 1951, the T waves were all normally upright and in 1956, six years later, the tracing remained normal.

As there is no way to state definitely that the above changes were all due to a state of low potassium, let us assume that instead they were due to infestation of the heart or pericardium by *S. stercoralis*. This is quite probable since the patient had such an overwhelming infection. In Kyle's⁽³⁾ case that came to postmortem, microscopic studies of the heart "showed scattered filariform larvae surrounded by focal accumulation of lymphocytes in the pericardium and in the interstitial tissue of the myocardium." In Kyle's patient the electrocardiogram showed only low T waves in I and II, and auscultation showed a normal heart. Were it not for the clouding of the picture

by possible hypokalemia, this case could be presented as strongyloidiasis involving the heart with electrocardiographic changes.

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Certainly driver education is of utmost importance. But shouldn't we insist by word of mouth or otherwise that safety features be loaded into an automobile, for maximum passenger protection even at the cost of sacrificing power, speed, and high horsepower? It appears to be a necessity when one is presented with the toll of fatal accidents. Since 1900 more people have lost their lives in cars than in the past seven wars in which citizens of the United States have fought. Editorial: Lip Service to Automobile Safety, J.M.A. Georgia 46:68 (Feb.) 1957.

The Proper Use of Posterior Pituitary Extract in Pregnancy*

Part I — Indications

JAMES F. DONNELLY, M.D.

WINSTON-SALEM

The most controversial subject in the field of obstetrics at the present time is the use of posterior pituitary extract during pregnancy. This hormone was first advocated as an agent to promote rapid delivery in 1909 by Blair Bell. For 10 years it was widely and enthusiastically used, only to be attended by an alarming maternal and infant mortality. After 1920 the use of posterior pituitary extract before delivery was widely condemned. Reports by Reid⁽¹⁾ and Eastman⁽²⁾, in 1946 and 1947, and the subsequent development of the intravenous technique by Hellman⁽³⁾ have done much to restore the drug to popularity.

Today no intelligent physician can deny that posterior pituitary extract has a useful place in obstetrics. Injudicious use of the hormone for elective inductions or inductions of convenience for the physician or patient will result in a number of unnecessary maternal and infant deaths which may lead again to its condemnation. The dangers associated with the use of posterior pituitary extract are well documented: postpartum hemorrhage, ruptured uterus, injuries to the maternal soft parts, fetal injury, amniotic fluid embolism, and numerous others. These accidents can happen and have done so in the hands of the most skilled obstetricians. Willson⁽⁴⁾ has pointed out that there is no need to assume such an unnecessary risk on an elective basis in a normal obstetric patient.

The Committee on Maternal Welfare has on file four maternal deaths from rupture of the uterus secondary to the use of posterior pituitary extract.

Commercially there are a number of posterior pituitary extracts, either alone or combined with other hormones. Pitocin is the only available commercial product which has adequate oxytocic activity, is

virtually devoid of undesirable side reactions, and is not combined with otherwise worthless drugs or hormones. Pitocin induction and Pitocin stimulation, although slightly different from the viewpoint of total dosage, are both subject to the same dangers, conditions, and contraindications. One of the unanswered questions is, does Pitocin induction or stimulation create normal labor?

Moore and D'Esopo⁽⁵⁾ were able to convert abnormal patterns of uterine inertia to those of normal labor with the use of Pitocin. The misuse or excessive dosage of Pitocin, however, can produce prolonged uterine contractions and tetany.

Pitocin in relatively large doses is used to create persistent contraction of the uterus, making it an effective agent for maintaining the contraction of the uterus following delivery or abortion. In minute doses it is used to induce or to stimulate labor. Indications for the use of Pitocin will be considered in four groups. The grouping was arranged on the basis of the obstetric literature, a survey of the opinions of the leading obstetricians in the eastern part of the country, a survey of the hospital practices within the state, and a personally conducted inquiry among the obstetricians in North Carolina.

Group One

Group 1 includes those conditions in which Pitocin was considered useful, clearly indicated, and comparatively safe. Nearly all the hospitals, medical schools, and obstetricians surveyed gave these indications a number one rating.

1. Third stage and postabortal period
2. Postpartum hemorrhage due to atony
3. Incomplete abortion
4. Inertia—primary and secondary

Third stage of labor and postabortal period

In comparison with the ergot preparations the action of Pitocin is quick and short-lasting, when both drugs are given intramuscularly. If Pitocin is given

*One of two articles on the proper use of posterior pituitary extract in pregnancy. The second will appear in a subsequent issue.

From the Committee on Maternal Welfare of the Medical Society of the State of North Carolina.

in the third stage of labor or in the post-abortion period, it should not be given until the placenta or all the products of conception have been expelled. It can be given in large and frequent doses, 1 to 2 cc. of 1:2000 as often as every 30 minutes. The administration of Pitocin by continuous intravenous drip is preferable to the intermittent intramuscular method, regardless of the indication.

Postpartum hemorrhage due to uterine atony

Pitocin is unquestionably the best therapeutic agent in *postpartum hemorrhage secondary to uterine atony*. It is essential to rule out other causes of *postpartum hemorrhage*—that is, retained placental tissue, uterine rupture, lacerations of the cervix, lacerations of the lower genital tract, maternal clotting defects, and so forth. If postpartum hemorrhage is anticipated by antecedent complications such as uterine inertia, twin pregnancy, or a hemorrhagic complication, an intravenous drip can be started immediately after the delivery of the placenta. Otherwise the drip is started when the hemorrhage becomes apparent. The drip may be continued for hours if necessary. A considerably larger amount of Pitocin (2 cc. to 500 cc. of 5 per cent glucose) can be given after delivery than before. Replacement of blood and other forms of treatment should not be neglected.

Incomplete abortion

Continuous intravenous Pitocin drip as given for the induction of labor is an effective means of evacuating the uterus in a patient with an incomplete abortion. Sometimes mechanical removal of placental tissue from the cervical os will be required. This technique will reduce the necessity of submitting the patient to anesthesia and dilatation and curettage, and avoids intrauterine interference in the presence of potential infection.

Inertia

Treatment of uterine inertia in the past has been very unsatisfactory. The use of continuous intravenous Pitocin drip is a considerable improvement. Several points in reference to inertia are worth mentioning. True labor will always cause progressive dilatation of the cervix, even though disproportion exists. The administration of

Pitocin in the presence of false or prodromal labor is not only unnecessary but may lead to considerable difficulty. Secondly, Pitocin should never be administered to a patient who is already having normal or nearly normal uterine contractions, as uterine tetany may be induced, resulting in fetal loss. The use of Pitocin in the hypertonic type of inertia, which is characterized by almost imperceptible relaxation between the contractions, is contraindicated.

The key to the management of inertia lies in its early recognition. If Pitocin is given in the early stages of inertia, the abnormal pattern almost invariably reverts to normal. The drip should be discontinued once normal labor is re-established. If inertia is not recognized until late, it may be better to give the patient a period of rest with heavy sedation, fluids, and other supportive measures before Pitocin stimulation is begun. Inertia is a frequent accompaniment of cephalopelvic disproportion or even a tight pelvic fit, so that competent x-ray pelvimetry and careful clinical examination by means of a sterile vaginal examination are essential before Pitocin is given.

Group Two

The second group of indications includes conditions in which induction or stimulation may be of value. Usually other methods of management are preferable and safer.

1. Toxemia of pregnancy
2. Premature rupture of the membranes
3. Inertia with questionable or borderline cephalopelvic disproportion
4. Inertia—secondary to analgesia or anesthesia

Toxemia of pregnancy

If, under medical treatment, all evidence of toxemia disappears, there is no indication for obstetric interference. Most patients with toxemia, however, improve under medical treatment but show evidence of persistent hypertension and/or albuminuria. Some patients show no improvement or even become worse under medical treatment. Interruption is indicated in the latter two groups after 48 or more hours of adequate medical treatment in the hospital. The urgency for interruption varies, and the method of interruption will depend upon the urgency of the situation. In certain patients with toxemia (when the indi-

cation for interruption is not urgent) interruption may be accomplished by repeated Pitocin induction⁽⁴⁾. This is particularly true if rupture of the membranes is contraindicated or impossible. This method of induction is extremely difficult and trying, since the patient is ill and the process may require a period of several successive days.

Premature rupture of the membranes

Patients with premature rupture of the membranes always present a problem. First, unless they are at term and the presenting part is engaged, they belong in the hospital. Attempts should be made to ascertain whether any abnormality is responsible for the premature rupture of the membranes. If the patient is not at term by date and by examination, she should be kept in bed and observed. A certain percentage of the patients will carry their babies to greater viability. Those having premature rupture of the membranes at or near term should be observed for 12 to 24 hours for the onset of spontaneous labor. The vast majority will go into labor spontaneously. Rectal and vaginal examinations should be restricted, and careful perineal care is essential. If the patient is at term, presents no abnormalities, and does not go into labor within 24 hours, Pitocin induction may be of value.

Inertia with questionable disproportion

Previous remarks with respect to the treatment of inertia applied primarily to those patients who had no evidence of cephalopelvic disproportion. In general, the use of Pitocin in the presence of questionable cephalopelvic disproportion is contraindicated. The usual precautions associated with Pitocin induction should be emphasized. The induction should be under the direct supervision of the attending physician at all times. If there is any question whatsoever about the progress of labor, Pitocin should be discontinued.

Inertia secondary to analgesia and anesthesia

Decreased uterine activity frequently follows the administration of analgesic agents, particularly if they are given too early in labor or in excessive amounts. The properly prepared obstetric patient rarely requires any analgesia before cervical dilatation reaches 3 to 4 cm. Occasionally, however,

inertia will develop after the administration of an analgesic agent. It is better and safer obstetric practice to permit the drug to wear off and normal labor to resume. The administration of all anesthetic agents — but notoriously caudal, spinal, intravenous Pentothal, and deep inhalation anesthetics — interfere with and often stop labor. The physician is then faced with the choice of delivering the infant by means of a fairly difficult forceps or permitting the anesthesia to wear off. The preferable management is to permit the anesthetic effect to wear off and labor resume. If Pitocin is used under these circumstances, it should be given as carefully as though for an induction.

Group Three

The third group of indications includes conditions for which Pitocin will occasionally be of some value. However, the dangers associated with its use usually outweigh the advantages.

1. Missed abortion
2. Premature separation of placenta
3. Placenta previa
4. Elective induction

Missed abortion

The problems of missed abortion is distressing to the patient and her family. With few exceptions, missed abortions are expelled spontaneously and are best let alone. Furthermore, it is difficult, if not impossible, to be certain that a fetus this early in pregnancy is dead. Pitocin induction is rarely, if ever, indicated.

Premature separation of the placenta

Two dangers are associated with Pitocin induction in the presence of premature separation of the placenta: (1) rupture of the uterus; (2) the possibility of amniotic fluid embolism with resulting maternal hypofibrinogenemia. Patients with premature separation of the placenta usually have short labor. Induction or interruption of the pregnancy is not indicated in minor episodes of bleeding, particularly those of the nontoxic variety. If bleeding is serious enough to justify interruption, the use of Pitocin must be considered, although simple rupture of the membranes will usually suffice.

Placenta previa

Placenta previa presents some of the same problems as does premature separa-

tion of the placenta. The site of implantation on the cervix and lower uterine segment renders this area particularly susceptible to lacerations which may result from excessive uterine contractions, unusual traction from below, and even from normal labor. In central placenta previa or extensive partial placental previa, cesarean section is the treatment of choice. In the other varieties of partial placenta previa, rupture of the membranes is preferable. Occasionally the presenting part fails to tamponade the placenta against the lower uterine segment. Careful use of Pitocin may result in successful descent of the presenting part and control of the bleeding.

Elective induction

Elective induction unquestionably underlies the controversy over the use of Pitocin. If the conditions for Pitocin induction are fulfilled, the patient is about ready to go into labor, so that little is gained in this respect. Any convenience associated with the procedure is for the mother and for the physician. It is doubtful that any mother would willingly undergo a procedure that carried even the slightest unnecessary risk for the baby or herself. The convenience, therefore, is really for the physician. Any complications which might result from such an induction are the result of an overt act on the part of the attending physician. Although the literature contains many glowing reports of the safety of elective Pitocin inductions, the Committee and its individual members are aware of many accidents associated with this practice which have never been reported. In fact there is one report of more than a thousand elective inductions in which it is stated that no complications occurred. Members of that hospital staff, however, have confided that there have been several accidents. It is interesting that the reports favoring the use of elective Pitocin induction invariably qualify their approval by stating that the physician handling the case must be adequately trained to perform these inductions. It seems illogical that a procedure requiring such highly specialized ability should be used routinely for any purpose. The fundamental problem is to decide who is adequately trained in the use of Pitocin, and who, therefore, should be permitted to use it and under what ground rules. There are perfectly adequate obstetric indications

for the use of Pitocin induction and these indications justify the risks the physician assumes when he uses it. The use of Pitocin on elective grounds does not have the same justification.

Group Four

In the fourth group are included certain conditions for which Pitocin induction has been recommended. It was the consensus of the Committee, however, that these complications rarely, if ever, indicate its use.

1. Therapeutic abortion
2. Premature induction of labor because of cephalopelvic disproportion
3. Rh sensitivity
4. Postmaturity

Therapeutic abortion

The indications for therapeutic abortion are now very limited. Pitocin, with or without antecedent administration of estrogen, is a very unsatisfactory method of interrupting early pregnancy. If therapeutic abortion is justified, it should be done by dilatation and curettage or, in the later stages of pregnancy, by hysterotomy.

Premature induction of labor for cephalopelvic disproportion

Premature induction of labor for cephalopelvic disproportion is a British practice and is not used in this country as far as the Committee was able to learn. Cesarean section certainly is the only method of management in this situation.

Rh sensitivity

Interruption of pregnancy for Rh sensitivity was discontinued some years ago because of the high mortality associated with prematurity plus erythroblastosis. Recently, however, reports of interruption of the pregnancy for Rh sensitivity have reappeared in the literature. This procedure should be considered experimental and restricted to only the very unusual cases in which the mother has had repeated fetal losses.

Postmaturity

The fetal risk associated with prolonged pregnancy has been emphasized in recent years. The frequency of true prolonged pregnancy is not known. The "postmaturity syndrome" is a condition in which the findings suggest placental insufficiency, which is a better term. It does occur more com-

monly in prolonged pregnancy. The fetal mortality associated with pregnancies prolonged beyond 42 weeks rises rapidly. In England and the Scandinavian countries obstetricians interrupt pregnancy after 42 weeks. In this country the date of the last menstrual period as a guide to the length of pregnancy is considered wholly unreliable. The most reliable evidence not of term but of impending labor is engagement of the presenting part, cervical effacement, and partial dilatation of the cervix. In the absence of these findings induction for the "overdue" patient is contraindicated.

Summary

The indications for posterior pituitary extract (Pitocin) in pregnancy have been divided for discussion into four groups, ranging from conditions for which the preparation is clearly indicated and in which its use is relatively safe to those for which

it is considered rarely, if ever, justified.

Unwise use of the hormone on an elective basis or for convenience is strongly condemned.

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Calcification of Intervertebral Discs in Children

Report of a Case

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DURHAM

Calcification of intervertebral discs generally has been considered a degenerative process, of no clinical significance, in adults. Rarely, cases of radiographically demonstrable calcification of the discs associated with local clinical signs and symptoms in children have been reported. The following case is the twenty-first to be reported in the English language literature.

Case Report

A 9 year old Negro boy was admitted March 17, 1955, to the North Carolina Memorial Hospital with a three week's history of pain and stiffness in the neck. Two weeks previously he had noted pain in the right shoulder. One week later the pain and stiffness gradually subsided. Because of these symptoms and abnormal findings in roentgenograms of the cervical portion of the spine obtained 12 days earlier, he was referred to the hospital.

The physical examination revealed a well developed, well nourished boy in no acute distress. The temperature was 99 F, the pulse 76, respiration 20, and blood pressure

100 systolic, 65 diastolic. The right shoulder was held higher than the left, with the head tilted slightly to the right. There was fairly good range of motion of the neck with the exception of extension, which produced sudden pain over the anterior portion of the right shoulder. Lumbar lordosis was prominent. Submandibular nodes were slightly enlarged symmetrically. The lungs were clear. A Grade I systolic murmur was heard over the precordium. Slight weakness of the deltoid and right biceps and triceps was demonstrated. No sensory deficit was apparent, and deep tendon reflexes were equal. The physiotherapists observed definite weakness of the entire right shoulder and arm, especially in the deltoid and latissimus dorsi muscles.

Accessory clinical findings: The hemoglobin was 10.8 Gm., hematocrit 44 volumes per 100 cc., white cell count 7,900, with 58 per cent polymorphonuclears, 3 per cent eosinophils, 45 per cent lymphocytes, 4 per cent monocytes. Sick cell preparation was negative. The urine was clear, pH acid, spe-

cific gravity 1.015 to 1.028. A skin test for blastomycin in a 1:1000 dilution showed 0.5 cm. induration at 24 and 48 hours; however, reaction to a 1:100 dilution was negative at 24 and 48 hours. A test for coccidioidin was negative. C-reactive protein was also negative. Spinal fluid examination revealed a clear fluid, normal pressure, and 14 lymphocytes per cubic millimeter. The Pandy test and serologic test for syphilis were negative. The colloidal gold curve was normal.

Stools were negative for ova and parasites. Nasopharyngeal and throat cultures grew hemolytic *Staphylococcus aureus*, *Neisseria* species, and *Hemophilus hemolyticus*. The blood urea nitrogen was 14 mg. per 100 cc., total proteins 7.2 Gm. per 100 cc., albumin 4.2, calcium 11.8 mg., potassium 6.1 mg., total cholesterol 182 mg., bilirubin 0.56 mg. The alkaline phosphatase was 7 Bodansky units and the uric acid 2.6 mg. per 100 cc.

A roentgenogram of the chest and fluoroscopic examination of the heart showed no abnormalities. Roentgenograms of the cervical and lumbar spine showed calcification between the fourth and fifth cervical vertebrae and the fifth lumbar and first sacral vertebrae.

An orthopedic consultant concurred with the diagnosis of calcified intervertebral disc syndrome of childhood.

On April 24, 1955, the child was free of symptoms and only mild residual weakness of the right upper extremity remained. On October 18, 1955, he was still asymptomatic and had no residual weakness. Cervical and lumbar films at this time showed that the calcification previously seen in the C₄ interspace was no longer present. Anteroposterior and lateral views of the lumbar spine again showed the amorphous calcific deposit at the fifth lumbar and first sacral interspace which was unchanged in size from the examination seven months before. In the lateral view there was a shadow of increased density in the fourth and fifth lumbar interspace, which may have represented calcification in that region.

Comment

An intervertebral disc consists of three integral parts: The nucleus pulposus, the annulus fibrosus, and the cartilaginous plates. The nucleus pulposus is a gelatinous

structure containing a network of fibers and remnants of the notochord. It occupies an eccentric position in the middle of the disc, being localized more anteriorly in the cervical and lumbar spine and more posteriorly in the thoracic spine. It is enclosed above and below by the cartilage plates bordering the adjacent vertebral bodies. The annulus fibrosus surrounds the nucleus pulposus like a capsule and is differentiated from it by its more abundant and much coarser fibers. It apparently provides strength and shape to the nucleus pulposus, which, on account of its resiliency, may act as a shock absorber⁽¹⁾.

Calcification can occur in the nucleus pulposus, the annulus fibrosus, or both. It also occurs in the cartilaginous plates, but this type has not been observed in children. Calcification in the annulus fibrosus is much more common than in the nucleus pulposus; however, it is now generally accepted that calcification in the annulus fibrosus probably represents a degenerative change and is of little or no clinical significance except in the instance of ochronosis. Calcification of the nucleus pulposus, however, is held by many to represent a different condition which occurs in childhood, is associated with clinical symptoms, and is of a transient nature. It has been suggested that nuclear calcification is traumatic in origin. Others have supported the theory of an infectious origin and think that some cases may be the result of metastatic infectious disease. Generalized metabolic disease has also been suggested⁽²⁾.

In 16 of the 21 cases local symptoms occurred at the site of the calcification. The other 5 cases were diagnosed on the basis of incidental findings noticed during the examination of patients with seemingly unrelated illnesses. No definite relationship can be made in these latter cases since no spinal roentgenograms in children have been evaluated as a control.

Etiologic factors

Generalized metabolic disease, particularly alkaptonuric ochronosis, can produce generalized calcification of the intervertebral discs, but would not be expected to cause isolated calcification of the type present in these patients. In addition, the clinical manifestations usually appear in the fourth and fifth decades⁽³⁾.

Sandström attempted to divide calcifica-

tions of soft tissues into two groups on the basis of their permanence or impermanence. Permanent calcifications are known to occur in various cartilaginous tissues, including the cartilaginous plates of the intervertebral discs and the fibrocartilage of the annulus fibrosus, as well as in other body tissues—for example costal cartilages, larynx, trachea, blood vessels, lungs, lymph nodes, and in calcifying disorders of connective tissue. Impermanent calcifications, apart from those induced by toxic doses of vitamin D, were ascribed to an inflammatory reaction originally named peritendinitis calcarea. This disease is characterized by local inflammatory reaction and calcification in connective tissue around tendons and joints and in adjacent muscles, accompanied by local pain and occasionally constitutional symptoms. Attention is then called to the morphologic resemblance between the structure of the nucleus pulposus and the tissue surrounding tendons^(2,4).

As mentioned previously, therefore, the reversible calcification in children is quite different from the irreversible calcification of the peripheral parts of the spine in adults. It is possible that the variations in vascularization of the discs in childhood and in adult life may account for these differences. It is well known that up to the age of 10 or occasionally even 20 there is a profuse blood supply to the the intervertebral disk through numerous vascular channels which are embedded in and perforate the cartilaginous plates. These vessels originate in the spongiosa of the vertebral bodies and are later obliterated by fibrous changes and cartilaginous invasion in adolescence and early adulthood⁽¹⁾.

From these facts two interplaying factors, either singly or together, could account for this transient calcification phenomena. Trauma to the highly vascularized disc in childhood may result in hemorrhage and hematoma formation and subsequent calcification. The rich blood supply would probably predispose then to the eventual clearing of the calcification⁽⁵⁾. In addition,

because of this rich vascular supply, calcification may be the result of a metastatic infectious process involving the discs. Supporting this theory is the observation that in some of the cases signs of infection such as fever, leukocytosis, pain, and increased sedimentation rate were noted. Attention is then called to the fact that since the discs are connected with the general circulation, they are open to invasion by any disease which may be spread by the blood stream⁽¹⁾. Therefore, although the evidence is far from being conclusive the best explanation for this type of calcification being found in children and not in adults is probably related to the rich blood supply to the disc found in children.

Summary

Another case of calcification of the intervertebral discs in childhood is reported. Of the total of 21 cases found in the English language literature, 16 showed local signs and symptoms of a disease process referable to the area of roentgen involvement. Although no conclusive evidence can be given as to the etiology of this syndrome, the possibility of its relation to the rich blood supply of the nucleus pulposus in childhood and its absence in adulthood is discussed.

The author is grateful to the Departments of Medicine and Pediatrics of the University of North Carolina Medical School for their help in the preparation of this report.

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In the past eight years, the proportion of the nation's total medical expenses met voluntary health insurance has increased three times as fast as the proportion of Americans holding such insurance, according to Health Information Foundation.

Postoperative Care Following Surgery of the Biliary Tract

THEODORE S. RAIFORD, M.D.

ASHEVILLE

Proper management of the patient following a surgical procedure may spell the difference between a smooth and satisfactory convalescence and a course beset by complications, discomfort, and frustrating problems. This paper presents accepted principles of management which in my experience have proved expedient in the care of patients following abdominal operations in general and operations on the biliary tract in particular.

Postoperative care begins the moment the patient leaves the operating table. This is the critical period when complications can be invited or averted. Before the patient regains consciousness, the surgeon, the anesthetist, and especially the recovery room nurse, should be constantly alert to any changes in his condition, even the most minor. Frequent observation of vital signs is a must. Dressings should be inspected frequently for any evidence of hemorrhage or excessive drainage. The respiratory passages should be kept free of accumulated secretions, and if signs of anoxia develop, oxygen should be administered promptly.

Postoperative orders should be explicit and comprehensive, and it is the surgeon's duty to see that they are carried out correctly.

Alleviation of Symptoms

Pain

The alleviation of pain—the most dominant symptom in the immediate postoperative period—can greatly simplify convalescence. Injection of the fascia and peritoneum with procaine has been advocated, but aside from producing some relaxation and facilitating closure, this measure in my experience, has little lasting effect. Of the many available narcotics, Demerol is perhaps the most satisfactory in that it exerts less spasmodic action upon smooth muscle. Its effect can be augmented and the dosage requirements decreased by the use of chlorpromazine. One should be aware of individual idiosyncrasies to any of the narcotics,

however, and troublesome postoperative nausea may be averted by changing the medication.

While some argue that constriction of the lower part of the chest impairs adequate respiratory exchange, I have found that a properly applied Scultetus binder not only gives the patient a sense of security and relieves tension on the wound, but actually aids respiratory exchange by permitting deeper breathing and coughing without undue discomfort.

Nausea and vomiting

Nausea and vomiting are normal sequelae in the majority of upper abdominal operations. While these symptoms are not in themselves serious, they can be alleviated in large part by the proper administration of anti-emetic drugs. Dramamine, given orally or parenterally, has found favor with many. It can be given intravenously along with fluids or hypodermically with the preoperative medication. Chlorpromazine is even more effective, and when given before anesthesia makes the latter more effective and prevents most of the immediate postoperative nausea. Chlorpromazine can then be given after operation should nausea recur. If vomiting due to obstruction, ileus or gastric dilatation occurs, gastric suction is indicated, until such time as normal peristalsis returns.

Distension

Abdominal distension, always a distressing symptom, can follow any type of operation or anesthesia, but seems to be especially frequent following operations on the biliary tract; it is usually due to diminished peristaltic activity. Stigmonene, in a concentration of 1:500, or surgical Pituitrin given during or even before surgery and at intervals of four to six hours after surgery is the most effective means of restoring peristalsis. Frequent changes in position and early ambulation, saline enemas, and the use of a rectal tube will also help in deflating the distended bowel. If distension is present to any marked degree it may be necessary to insert a Levin or Miller-Abbot tube to aid in deflation.

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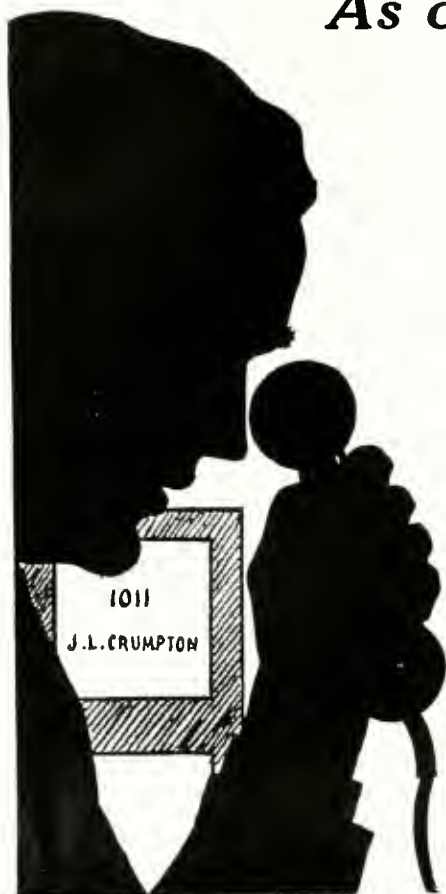


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Adjunctive Therapy

Position and ambulation

A semi-Fowler's position not only is more comfortable to the patient when the effects of the anesthesia are over and the blood pressure is stabilized, but it helps prevent the collection of bile, blood or serum beneath the diaphragm. Frequent changes in position and deep breathing are effective in preventing pulmonary congestion, and coughing will aid in expelling bronchial secretions. Leg exercises help to prevent venous stasis and possible phlebitis. Care should be taken to avoid more than momentary angulation of the joints of the lower extremities.

The value of early ambulation in promoting convalescence is an established fact. I personally favor letting the patient swing his legs from the side of the bed as soon as he is well over the anesthesia. From this he can rapidly advance to sitting up for short periods, and then to standing and walking. Under this regimen all body functions appear to return to normal earlier.

Antibiotics

Uncomplicated biliary tract surgery rarely requires antibiotics, unless the surgeon has reason to fear postoperative infection. In such cases any of the routine antibiotics such as penicillin, tetracycline and Chloromycetin will suffice as a prophylactic. If acute suppurative disease is present, however, sensitivity tests should be used to determine the indicated antibiotic agent.

Parenteral fluids

The postoperative administration of intravenous fluids is necessary in order (1) to maintain water balance; (2) to increase liver function; (3) to minimize renal impairment, (usually associated with jaundice); (4) to compensate for loss of bile (in the presence of common duct drainage or fistula) which may vary from 300 to 1,000 cc. in 24 hours; (5) to compensate for loss by vomitus or gastric drainage.

A solution of 10 per cent glucose or invert sugar either in water or normal saline is the fluid of choice, although unless large quantities of the sodium ion has been lost, water is preferable for the first liter at least. A good method is to administer 1 liter of 10 per cent glucose in water containing any supportive drugs indicated, such as intravenous antibiotics or vitamins, to be fol-

lowed by 1 liter in normal saline, adding 20 to 40 milliequivalents of potassium chloride if there is reason to believe that a state of hypokalemia exists or is impending. If preferred, Darrow's solution can be substituted for the second liter. Plasma or whole blood are used where indicated by anemia or hypoproteinemia.

The daily requirement can be easily calculated by assuming that the average adult needs 2,000 cc. of fluids per day. From this amount any fluid the patient may be able to retain by mouth should be subtracted, and any loss by drainage, suction or vomiting should be added.

Kidney function

Inasmuch as renal function is frequently impaired in the presence of jaundice, close observation and maintenance of function must be carried out. Accurate measurements of intake and output should be made. An output of 1,500 cc. with a specific gravity of 1.015 is generally regarded as satisfactory, although as a result of stress mechanism this may be reduced during the first 24 hours. Early voluntary voiding can be promoted by the use of Stigmonene, (1-500) and, in males, by allowing the patient to stand while attempting to void, thereby eliminating the uncomfortable necessity of postoperative catheterization. When catheterization is necessary, however, I believe that catheterization at 8 to 12 hour intervals is preferable and less conducive to infection than is an indwelling catheter.

Diet

After surgery the diet should be restored to normal as soon as nausea has ceased. It is our custom to start the patient on clear liquids as soon as he recovers from anesthesia, progressing to soft or regular diet as soon as he is able to retain it. Carbohydrates should be given in abundance and bile salts should be replaced, especially where there has been pronounced loss of bile by drainage. This can be done by re-feeding the patient's own bile drainage through a Levin tube (the so called "bile cocktail"), by lyophilized ox bile, or what is probably simpler, the administration of enteric coated bile salts. The diet should be low in fats in view of the probable diminished bile flow.

Care of wound

Dressings are a matter of individual

preference. I personally prefer a plastic covered Telfa dressing next to the wound, as its porous texture permits absorption of serum, it does not adhere to the raw edges of the incision, and the cotton portion can be removed, leaving the transparent plastic sheet in place as a protection against contamination while permitting inspection of the wound. Adequate absorbent pads are used where drainage is present, and, if profuse, require frequent changing. Montgomery straps prevent excoriation and irritation of the skin by frequent re-application.

If drainage contains excoriating secretions such as duodenal contents and pancreatic juice, protecting the adjacent skin assumes vital importance. This can be done by the careful application of Telfa pads coated with Hydrosal (aluminum hydroxide in a lanolin base), and by continuous suction with a Stedman pump through a small catheter, so fixed as to carry the secretions away from the abdominal wall.

Drains placed as a prophylactic measure should be loosened in two or three days, gradually shortened, and completely removed after six or seven days, unless a fistula develops or the drainage is profuse for other reasons. In this event, the drains should be left in place until the amount of flow has definitely diminished. Skin sutures may be removed from six to eight days after operation, but stay sutures, if used, should remain two or three days longer.

Special Considerations

Hypoprothrombinemia

One of the most insidious complications following surgery for certain types of biliary tract disease derives from hypoprothrombinemia. Usually occurring in the presence of jaundice, it is due to lack of Vitamin K and bile salts. When prothrombin activity is less than 35 per cent, the patient is subject to hemorrhagic diathesis. When activity is less than 20 per cent, spontaneous hemorrhage may occur, frequently with disastrous results and no forewarning. Prevention of this phenomenon entails determination of the prothrombin level before, during, and after surgery. Any deviation from normal can be guarded against or corrected by the administration of blood plasma and Vitamin K and bile salts. Mephyten is extremely helpful if

rapid restoration of prothrombin time is necessary.

Drainage of biliary tree

When the biliary tree is not opened, no special precautions need be observed other than providing escape for any bile leakage. Whenever the common duct is opened it is customary to provide a safety valve by means of a T tube placed in the duct. Its management following operation depends in great part on the condition of the duct. In the absence of distension and without constriction of the ampulla necessitating dilatation, a short arm T tube is used. Since it functions solely as a safety valve and in no way prevents the flow of bile through the common duct, it can be clamped off safely after 24 to 48 hours and opened only if increased biliary drainage suggests leakage or pain indicates duct obstruction. By the seventh or eighth day a sinus tract sufficient to permit removal of the tube has probably developed.

When the duct has been distended, stones have been removed, the ampulla has been dilated, or edema is present, the T tube requires more attention. When the ampulla has been dilated forcibly, a long arm T tube will no doubt have been placed through it to prevent constriction by scarring. In this event, the tube should be connected to bottle drainage for six to eight days, after which it may be clamped off for increasing periods of time. It should be kept in place until healing has occurred and edema has completely subsided, usually two to three months. When the common duct has been found to be distended, it should be decompressed gradually to prevent hyperemia of the liver. This can be accomplished simply by placing the drainage bottle at body level and gradually lowering it, or by the use of a glass Y tube inserted as a trap in the drainage tube, attached to a bedside stand and gradually lowered each day. Before removing the T tube in any event it is well to insure patency of the biliary tree by a cholangiogram, especially if stones were found in the common duct. The use of a catheter in lieu of the conventional T tube has been advocated, but is mentioned only to be condemned. In the only case in which I have seen it used, the tube did not pass into the duodenum after its release and a second operation was necessary for its removal.

When cholecystostomy is performed with tube drainage, the tube should be left open until any edema and inflammation has subsided, usually a matter of eight to ten days. It can then be safely clamped off at intervals, providing there is evidence of patency of the cystic and common ducts, and removed in eight to ten days after the cholangiogram has confirmed patency of the biliary tree. If this cannot be demonstrated, the tube should be left in place at least until a sinus tract is well formed, or preferably until a second, definitive operation is performed. The same principles are followed if a gallbladder stump has of necessity been left and drained.

Complications

Hemorrhage

Hemorrhage is the earliest and most alarming complication. It may arise as a result of oozing from fresh or raw surfaces, especially if the gallbladder bed is injured during removal, and may reach alarming proportions if jaundice is present. Bleeding from the cystic artery or anomalous vessels is apt to be more rapid and massive, and may produce early shock with epigastric pain simulating a coronary attack. Treatment includes blood replacement, Vitamin K or Adrenosem if the hemorrhage is thought due to oozing, or immediate surgical intervention if the bleeding is massive.

Bile peritonitis, while developing less rapidly, is no less serious. It may be the result of a slipped ligature on the cystic duct, leakage of bile from the liver bed, inadvertent division of an accessory bile duct, or leakage around the T tube. Physical signs are usually jaundice, hiccoughs, distension, exquisite direct and rebound tenderness, fever, spreading pain, profuse bile drainage, and profound shock. Treatment must be prompt and drastic. Fluid replacement, plasma, transfusions followed by exploration, evacuation of bile with copious peritoneal lavage, and establishment of adequate drainage, preferably by a sump drain, are indicated. Vigorous supportive measures should follow.

Biliary fistula usually follows leakage from the gall bladder bed or around the T tube. Symptoms are not especially alarming and maintenance of adequate drainage suffices, inasmuch as the fistula usually closes spontaneously.

Postoperative sepsis is not a frequent complication unless acute infectious disease is encountered. There may be contamination of the wound, in which case drainage and antibiotics are indicated. If common duct infection is encountered, suppurative cholangitis may complicate the postoperative course. This condition is characterized by chills and fever, a spiking temperature, tenderness over the liver, and associated jaundice. Treatment consists of supportive measures and proper antibiotics as indicated by sensitivity tests.

Persistent biliary fistula is the result of the factors named in the preceding section plus obstruction of the common duct. This is due most often to a residual stone in the ampulla, stricture of the common duct, or, less frequently, neoplastic disease compressing the ampulla. Treatment consists of re-exploration and the proper reconstructive procedure or palliative shunt.

Cholangitis as a late complication usually follows closure of a biliary fistula in the presence of obstruction. It is characterized by spiking temperature and tenderness over the liver associated with jaundice. Treatment is directed toward re-exploration, re-establishment of drainage, and removal of the source of obstruction.

The post-cholecystectomy syndrome, characterized by continuation of the symptom complex similar to that attributed to the gallbladder disease prior to operation, is a moot subject. The confusion as to its nature is amply attested to by the numerous causes to which it has been ascribed. Residual stone in the common duct, a long cystic duct stump, stone in cystic duct, remainder of double gallbladder, neuroma in the region of the cystic duct, violations of dietary limitations, and many other etiologic possibilities have been mentioned. Relief of the symptom complex is just as difficult. Suffice to say that if all functional aspects of the problem can be eliminated, re-exploration may be justified in an attempt to correct any abnormal condition which may exist. The prognosis however, is uniformly poor.

Pancreatitis following surgery on the biliary tract is due presumably to regurgitation of bile into the pancreatic duct. It is characterized by mid-epigastric pain, usually radiating to the back, and may be accompanied by fever and elevated serum

amylase, especially if the episode is acute. The condition may be chronic, recurrent or acute, and may occur only after removal of the T tube. Treatment is conservative in the acute attack; ampullotomy is indicated if the condition becomes chronic or recurrent.

Stricture of the common duct: Although a small percentage of common duct strictures may be due to inflammatory or neoplastic disease, or an idiopathic cause, the vast majority are traumatic in origin and constitute one of the most distressing complications following surgery of the biliary tract, especially cholecystectomy. Whatever the extenuating factors may be, whether masking of the anatomy by inflammatory edema and adhesions or anatomic abnormalities, traumatic stricture is usually the result of failure to recognize and meticulously avoid the duct during the removal of the gallbladder. The most common symptoms are jaundice, acholic stools, biliuria, itching, debilitation, or persistent biliary fistula. Treatment consists of re-exploration and reconstruction of the common duct, internal drainage by choledochojejunostomy, or permanent external drainage.

Prognosis is guarded, for even in the most experienced hands complete recovery is all too rare.

Summary

Proper management of the patient undergoing surgery in the postoperative period has been outlined. Postoperative care is divided roughly into three phases.

Symptomatic management is directed toward alleviating the primary symptoms of pain, nausea and vomiting, and distension.

Adjunctive therapy includes attention to position, ambulation, antibiotics, parenteral fluids, renal function, diet, care of the wound, attention to the prothrombin level, and drainage of the biliary tree.

Complications to be avoided are hemorrhage, bile peritonitis, biliary fistula, postoperative sepsis, cholangitis, post-cholecystectomy syndrome, pancreatitis, and stricture of the common duct.

Proper care during the postoperative period is equally as important as the preoperative and operative phases of surgical management, for without it the most satisfactory operative procedure may go for naught.

Management of Imperforate Anus

LOUIS SHAFFNER, M.D.

WINSTON-SALEM

The management of imperforate anus is a twofold problem. There is the immediate need to relieve intestinal obstruction by surgery. Equally important, however, is a choice of procedure which will ultimately allow the individual to have normal bowel function and control. This second consideration is often overlooked in the urgency to establish some type of bowel opening as soon as possible. Judging from our referrals, there apparently still is a great temptation to do a minor "stab" incision in the perineum or a colostomy as soon as the diagnosis is apparent.

The inadequacy of either procedure will become apparent after two or three weeks

in one or two ways. Either the "stab" wound will begin to form a stricture, causing another partial obstruction, or in cases of rectourinary fistulas, chronic urinary infection develops even in the presence of a colostomy. After these complications have developed, surgical attempts at secondary repair are much more difficult and the results in most cases far from satisfactory.

The most distressing case which has come to our attention was that of a boy first seen at the age of 6 years. He had spent his whole life in a hospital, having had five perineal and six abdominal operations in an attempt to relieve an imperforate anus with a rectourethral fistula. He still had a fistula into the urethra, numerous rectal fistulas, a bladder stone, and a poorly functioning colostomy. During the next seven years two additional abdominal and four perineal procedures were at-

Read before the North Carolina Surgical Association, Hot Springs, Virginia, March 22, 1957.

From the Department of Surgery, Bowman Gray School of Medicine of Wake Forest College, Winston-Salem.

Table 1
Classification of Imperforate Anus
(41 cases)

Type		No.	Per Cent
Stenotic (type 1)		5	12
Membranous (type 2) 5 male (no fistula)		6	15
Imperforate (type 3)		29	71
Male	Fistula	73%	
	Rectourethral	6	
	Rectoperineal	4	
	Rectovesicle	1	
	None	4	
Female	Fistula	100%	
	Rectovaginal	12	
	Rectoperineal	1	
	Rectovesicle	1	
Atretic (type 4)		1	2
		41	100

tempted to cope with his problem, and he is still incontinent of urine and feces.

Forty-one cases of stenotic or imperforate anus seen at the North Carolina Baptist Hospital have been reviewed with regard to immediate and late results. Our results correspond closely with recent reports in the literature and re-emphasize the importance of adequate appraisal of the anomaly before any surgery is undertaken.

Gross⁽¹⁾ has classified the various cases according to four types, and comparable descriptive terms have been suggested by Kiesewetter⁽²⁾. In the stenotic group (type 1) the anus is in the normal position, is patent but fibrotic, and may lead to some degree of impaction or obstruction. In the membranous group (type 2) there is merely a failure of the anal membrane to rupture. The most common is the imperforate group (type 3), and here are found the associated fistulas into the urinary tract, perineum, or vagina. In the atretic group (type 4) the anal canal is normal, but the rectal pouch ends blindly at varying distances above it. The incidence of each in our series is shown in table 1.

Diagnosis

Type 1 (stenotic)

Cases of the stenotic type may not be diagnosed for several weeks or months unless a rectal examination is done routinely soon after birth. Meconium is passed, but in time the baby is noted to strain markedly on defecation and the stools may be very small in calibre. A partial obstruction with vomiting and impaction may be the first sign. Two of our patients did not present symptoms until the second and third months of life.

With a complete obstruction the diagnosis becomes evident within a day or two after birth, by distension and failure to pass meconium, and examination by inspection or anal palpation will reveal either the absence of an opening or a blind anal pouch as in the atretic type.

Type 2 (membranous)

More careful inspection of the perineum will usually differentiate the membranous from the imperforate type. With a thin anal membrane not more than 2 or 3 mm. thick the perineum bulges and there is a characteristic bluish-black discoloration indicating the presence of backed-up meconium. Associated fistulas are rare in this group, and none occurred in our series.

Type 3 (imperforate)

The imperforate group (type 3) is marked by the presence of an anal dimple or ridge and by the significant absence of bulging in the area. Puckering of the skin in the anal area upon stimulation may indicate sphincter and levator function, but the eliciting of this sign is not constant even with good muscle present. We have not found this sign of significance in treatment.

The important feature of the imperforate group is the presence or absence of an associated fistula. In the *female* the most common sites are in the vaginal fourchette or in the lower vagina. Less common are the rectoperineal or rectovesicle fistulas, the latter being very rare and often associated with other severe anomalies. If the fistula is in the fourchette, it may function satisfactorily for a time and the anomaly be overlooked until impaction occurs. In our series all 14 patients had some type of fistula.

In *males* the fistula may be rectourethral, in case meconium or meconium-stained urine is passed, or rectoperineal, the opening located usually in the mid-line near the base of the scrotum, and in one of our cases at the base of the penis, suggestive at first glance of a hypospadias. A rectovesicle fistula will manifest itself by urine grossly contaminated with meconium. The important point is to suspect some type of fistula in about three fourths (73 per cent) of the cases in males. It may take as long as 12 or 24 hours for meconium to appear spontaneously through a tiny perineal or urethral fistula, but recognition of its pres-

ence is essential, since the extent of surgery needed is partially governed thereby. Potts, Riker, and DeBoer⁽³⁾ have emphasized that this observation is as important as the determination of the distance between the anal skin and the lower end of the rectal pouch.

The determination of the distance between the rectal pouch and the anal skin by the method of Wangenstein and Rice⁽⁴⁾ is imperative in males. Briefly it consists of a roentgenogram made of the baby held in an inverted position, so that the air in the colon will outline the most distal portion of the rectal pouch in comparison with a lead marker or thermometer bulb held at the anal skin. If a fistula is present, air may outline it, opening into the bladder or the urethra. It may require 24 to 48 hours, however, for the colon to fill up with air sufficiently to outline the distal end, and even then the meconium may not be completely replaced, so that the rectal pouch-skin distance may be overestimated. Rhodes⁽⁵⁾ has made the valuable but little known suggestion that a better estimation of distance may be made if the child is placed on its side to overcome the effect of gravity on the heavy colon, the thighs then being forcibly flexed upon the abdomen in order to compress and force the colonic gas into the pelvis. Rhoads and Koop⁽⁶⁾ have found this method helpful in outlining the anomaly at an earlier hour.

If the rectal pouch is within 1.5 cm. or less of the anal skin, a satisfactory perineal dissection can usually be done. A distance greater than this, especially if associated with a rectourethral or rectovesicle fistula, indicates that an abdominoperineal approach is necessary. Further roentgen studies such as cystograms or injections of opaque material into perineal fistulas do not appear justified, since local examination with probing of perineal fistulas and air contrast studies give all the information necessary.

It should be emphasized that many of these infants have other congenital anomalies, some of which are quite serious, and they may be multiple. Twenty-one, or 50 per cent, of our patients presented anomalies. As in other series the most predominant were those of the genitourinary tract (13 per cent), tracheo-esophageal fistula with or without atresia (13 per cent), and

congenital heart disease (11 per cent). Approximately one fourth of all cases, therefore, presented serious anomalies of either the heart, the esophagus, or both. Three of the 9 deaths in our series were directly attributable to these anomalies.

Treatment and Results

The technical details of the various procedures have been excellently presented and illustrated in recent publications^(1,3,6) and need not be repeated here. Mention will be made, however, of indications for the various operations and our use of them.

A transverse colostomy may be all that is possible in a critically ill child with other severe anomalies, precarious prematurity, damage to the central nervous system, or neonatal asphyxia. We have had 2 such cases. Secondary colostomies have been used in complicated late cases to relieve severe impaction prior to an attempt at definitive therapy.

In the stenotic group frequent anal dilatations, at first with small dilators such as the Hegar, are usually successful. Such dilatations should be continued as often as necessary, every week at least until it is possible for the mother to insert her gloved index finger above the first joint. This may require two or three months. In 2 of our 5 cases, because of the severity and unyielding nature of the stenosis, the situation was quickly managed by a simple proctotomy in the posterior commissure, leaving the skin open for drainage but pulling the mucosa down to the mucocutaneous line. This gave immediate relief, and the mother was able to dilate the anus every day without significant discomfort on the part of the patient or apprehension on the part of the mother until healing was complete.

In the membranous group experience has shown that just a "stab" incision will lead to a stricture which is difficult to dilate. The incision should be cruciate, with an opening large enough to admit the tip of the finger, and the mucosa should be pulled down to the skin in order to minimize scarring. There will be some scarring which does require dilatation; in our 6 cases results have been good, but dilatations have been necessary up to a year following surgery. This procedure is relatively simple, and can be performed under local anesthesia without shock. Relief of the obstruction

is immediate, and the baby need not miss a feeding.

The large group of imperforate cases, with or without fistula, presents the main problem as to the choice of procedure. The problem in the female differs somewhat from that in the male.

In the female it is usually one of a perineal dissection, if either a rectovaginal or rectoperineal fistula is present. The main decision then is when to operate. In the presence of a fistula large enough to allow passage of feces and gas, some surgeons previously advised dilatation of the fistula until the child was 4 to 6 years of age in the hope that growth of the patient would make dissection easier. Such a long delay is not advisable. All 3 of our older patients, aged 4 to 8 years, with rectovaginal fistulas had repeated bouts of impaction, required repeated enemas, laxatives and painful dilatations, and lacked bowel control. These children have been followed for one and a half to eight years, and in each case bowel control was eventually restored, but not before a long period of anal dilatations and re-education requiring close supervision by the mother and the doctor, with marked discomfort and annoyance to the patient. Even after control has been established, however, the patients still have difficulty in emptying their bowels completely. They are victims of a functional megacolon with chronic constipation, requiring frequent laxatives and occasional enemas to prevent impaction, even though no stenosis is present. Our experience confirms that of Potts, that the sooner a child's anatomy is restored to normal, the better is his or her chance of developing normal function.

Most authorities advocate early perineal dissection in the female with a low fistula. Rhoads and Koop⁽⁶⁾ and Browne⁽⁷⁾ have advocated for the low vaginal fistula just a mid-line incision, making a cloaca-like opening and postponing definitive surgery for several months. Apparently in some cases no further operation is necessary. The perineal dissection usually employed requires extensive mobilization of the fistulous tract and the lower portion of the rectum, especially where it is attached to the posterior vaginal wall. The rectum is then pulled down through the perineum near the coccyx in the normal position.

This is a tedious procedure, and the main technical pitfall is failure to free the rectum enough to pull it down without tension. If the bowel retracts, a stubborn stenosis is sure to result. Even without retraction, some stenosis may occur. Six of our 7 neonatal patients had (or needed to have when last seen) a minor secondary anoplasty within two months to relieve a stenosis unyielding to dilatations alone.

Breakdown of the perineal body is also a danger, if the incision over the sphincter is made large enough to dissect the rectum adequately. Potts has found that a second transverse incision, as in a posterior colporrhaphy, makes the dissection easier and healing more certain.

High vaginal or vesicle fistulas in the female require an abdominoperineal dissection as in the male.

In the male a low rectal pouch with a perineal fistula may be approached from below, care being taken to identify the urethra at all times. We have used this approach in 2 patients who were followed for one and eight years respectively, with excellent results.

Only rarely will the rectal pouch with an associated urethral fistula be within 1.5 cm. of the anal skin and amenable to a perineal approach. Our one primary case, followed 15 months, has done well.

In the male the rectal pouch is usually high, with or without a fistula. An abdominoperineal pull-through is the only sure way of getting an adequate length of bowel and at the same time closing the fistula. This fact, so well documented in the literature, becomes obvious once the abdominal dissection is made. The high pouch usually terminates in the fistula well above the levator muscles, and even after mobilization it is sometimes necessary to cut one or more sigmoidal arteries to allow the pouch to reach the anal skin without tension. A perineal approach would be futile under these circumstances, and the distressing case previously mentioned is an extreme example.

Admittedly the abdominoperineal operation is a major undertaking, requiring a vigorous baby, transfusions, and meticulous postoperative care for a good immediate result. The outlook for normal function later is still in doubt. Potts believes that a completely normal rectum after such a

procedure is rare. Experimental work by Gaston⁽⁸⁾ and by Goligher and Hughes⁽⁹⁾ suggests that a recto-anal reflex is necessary for continence. Potts states that an abdominoperineal dissection must sever some part of this reflex arc, if indeed any was ever present, and that the patient will end up with little more than a perineal colostomy, which may be controlled only as a colostomy. Gross, however, has reported normal or satisfactory results in 50 per cent of 73 cases.

In our series are 7 survivors. Two are infants, still incontinent; 2 have strictures and need further surgery; but the other 3, followed two to four and a half years, have had good results.

The oldest patient was a girl with a high vaginal fistula, double vagina, and double uterus operated on at the age of 15 after a colostomy to relieve a chronic impaction. After three months the colostomy was closed. After six months she required a minor anoplasty for a slight stricture. Dilatations were continued 16 more months, but during the last 18 months she has had excellent bowel control and only rarely needs a laxative. During this time she has married, conceived, and delivered a 7 pound 5 ounce normal male baby from the right uterus.

Our one case of the atretic type was actually a thin diaphragm with a tiny hole in the center. This was repaired by excision and mucosal suture from below, with an excellent result two years later.

Strictures and Other Complications

Although Gross stated that dilatations are unnecessary if the procedures are properly performed, it has been our experience and that of others that almost all patients need dilatations for some period, no matter what type of procedure is done. These must be continued up to six months or even longer, gradually decreasing in frequency, until the opening is adequate and the scar has become soft and pliable.

There is debate about whether the original anal opening through the sphincter should be made large or small. In our group, even with attempts at forming an opening large enough to admit a finger easily, there has been no anal prolapse or incontinence. It seems that initially control is due to levator action. Only after the annular scar at the mucocutaneous line

begins to soften over a period of months does the external sphincter function significantly. The important consideration in making the anal opening seems to be that of spreading rather than cutting the external sphincter and levators. Many of our infants have had moderate to severe anal skin excoriations which have been difficult to treat until the suture line does soften and allow good sphincter action.

Five of 9 deaths were from other anomalies or unrelated causes, and 2 were from unknown causes at home within one month. Only 2 patients died in the immediate post-operative period. In 1 of these an ileus and peritonitis developed after a pull-through, and subsequently the patient was found to have megacolon and megalo-ureters. The other died from shock after evisceration of a colostomy for chronic obstruction at 6 months of age.

Summary and Conclusions

Initial repair of imperforate anus should not only relieve the obstruction but offer good promise of normal bowel control and function.

Accurate diagnosis as to the type of anomaly, with or without a perineal, urethral, vesicle, or vaginal fistula, is essential to adequate treatment. Other serious anomalies involving the heart, esophagus, and urinary tract are common and should be sought for.

The membranous type of imperforate anus can be easily treated by simple anoplasty.

In the imperforate type, with the rectal pouch 1.5 cm. or less from the anal skin, a perineal approach is usually possible and should be attempted.

With a higher pouch, especially in the male with a rectourethral fistula, an abdominoperineal pull-through procedure is indicated.

Forty-one cases have been reviewed. Only 2 of 9 deaths were definitely attributed to operation for imperforate anus.

Follow-up ranging from 1½ to 13 years in primary perineal procedures showed good to excellent results in 10 cases; in 3, wound breakdown or stricture was noted when the patient was last seen.

Of 7 patients undergoing abdominoperineal repair, 3 have good function after two to four and one-half years; 2 infants were

recently operated on, and 2 have strictures requiring further surgery.

All patients required postoperative dilations, and about half needed an additional minor anoplasty.

Colostomy should be used only as a temporary measure to help handle complications.

The earlier definitive repair is done, the better is the chance for normal control and function.

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Appendicitis In Children

GEORGE W. PASCHAL, JR., M.D.*

RALEIGH

Appendicitis was given its name by Dr. Reginald Fitz of Boston in 1886⁽¹⁾.

Since then operation for appendicitis has been done with considerable frequency, and while the mortality from the disease has been greatly reduced, deaths result from it in such frequency as to spur all who treat the disease to omnipresent vigilance.

This paper deals with appendicitis in children, 12 years of age or younger, at the one Negro and two white hospitals in my community. In the three hospitals (Rex, Mary Elizabeth, and St. Agnes) a total of 358 operations for appendicitis were performed in the five-year period 1952-1956. At Rex there were 220 cases, at Mary Elizabeth 92, and at St. Agnes 46. All surgeons of the community are involved in these statistics. During these five years no death occurred in this age group as a result of appendicitis in our community. In the state as a whole at least 19 children died from this disease during the same period⁽²⁾. Of these, 2 were less than 12 months old; 6, 4 years or younger; 3, 9 years or younger; and 8, over 10 years.

The incidence of appendicitis appears unchanged. A review of the literature, reveals varying mortality rates of 0.4 per

cent to 5.8 per cent over the past 30 years. The majority of deaths were attributed to either "purgatives or procrastination." Dr. Hubert Royster, among others, avoided no opportunity to admonish his contemporary colleagues to everlasting vigilance and warned that "delay is still the deadly sin and that back of it looms a lack of moral courage."⁽³⁾ He believed that is is "perforation or gangrene, or both, that kills." Both the mortality and morbidity are in direct proportion to progress in the surgical management of the disease, and have certainly been reduced by current methods of management. Early diagnosis, re-establishing and maintaining electrolyte and fluid balance, antibiotics and chemotherapy, improved anesthesia, and tender surgical care combine to enhance the probability of "cure."

Review of Patients

For the 92 patients operated on at Mary Elizabeth Hospital, the average hospital stay was 4.2 days. Two of these were in the hospital 12 days and one of these 2 had a second operation for complicating postoperative obstruction. The youngest of these, a 3 month old infant with gangrenous appendicitis, was discharged on the fourth day. Seven had gangrenous appendicitis with perforation and varying degrees of peritonitis; 4 had drainage; in 14 the pathologist found no evidence of disease, but in

Read before the North Carolina Surgical Association, Hot Springs, Virginia, March 22, 1957.

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5 the surgeon had made an additional clinical diagnosis of "mesenteric adenitis"; 3 of them had an associated Meckel's diverticulum.

Of the 220 cases at Rex, 13 were marked by perforation and 8 were associated with Meckel's diverticulum; 15 were given a discharge diagnosis of mesenteric adenitis. The pathologist failed to confirm the diagnosis in 21 instances.

At St. Agnes there were 46 appendectomies, with 5 of the patients showing no disease upon pathologic study. The average hospital stay for patients at each of the other hospitals was generally comparable to that at Mary Elizabeth.

It is unwarranted to assume that the absence of mortality from appendicitis in our community from 1952 to 1956 resulted from more information or superior treatment locally. I think, however, that this noteworthy and fortunate—if not lucky—circumstance is the result of current methods of management, practiced generally by the surgeon of today. The following phases of management of appendicitis in children bear repetition here.

Management

Early diagnosis

Deaver stated that "the difference between children and adults does not lie in a difference of pathology, signs or symptoms, but in the greater difficulties of making a diagnosis in children. The chain of pathologic events in children is essentially the same as that in adults. The progress of the disease is often more rapid in children than in adults and there is less chance of localization in children."⁽⁴⁾ Most physicians and surgeons follow the general rule that abdominal pain, nausea, and vomiting associated with slight fever should always be attributed to acute appendicitis unless proved otherwise. I think it is generally agreed that the most difficult diagnosis becomes more apparent with the passage of time. What is an obvious diagnosis to an admitting physician may six hours previously have been a most difficult problem to an experienced surgeon.

In the less clear-cut cases a diagnosis can generally be reached by repeated careful examinations. There is no reason to wait for extreme inflammatory changes and peritoneal involvement to develop. Hudson and Chamberlain⁽⁵⁾ stressed the necessity for

frequent observation. Most of the referring doctors in our area find that circumstances do not permit observation at home at frequent intervals and direct the patient to the hospital. Not only does the physician realize the importance of the time element, but the general population has come to know that abdominal pain and vomiting "might be appendicitis," and patients come to the hospital with little urging.

Symptoms

Pain—usually in the right lower quadrant but often generalized at the onset—is the most constant of all presenting symptoms. Children under 4 years of age are likely to describe their complaint somewhat inaccurately, and in this group the area of the umbilicus or the abdomen generally is claimed to "hurt the most." In a series of 848 patients Hudson and Chamberlain⁽⁵⁾ reported that 82.8 per cent vomited once or more, the vomiting succeeding pain in 81 per cent and preceding a complaint of pain in 18 per cent. Vomiting preceding complaint of pain, they reported, was much more frequent among the patients under 4 years of age than in the older children.

Associated urinary complaints were present in a relatively small percentage of cases, in none of which was a second primary diagnosis of urinary tract disease made. Routine urinalysis was simply "routine." It should be done to exclude other conditions.

Constipation is not an uncommon symptom. *Diarrhea* has been reported in some instance and, when present among my personal cases, has been associated with a markedly suppurative, gangrenous or perforated appendix.

Temperature readings were variable, ranging from normal to 104 F. The great majority of patients have fever of 101 F. or less, but a higher temperature certainly does not exclude appendicitis as a diagnosis.

Changes in the peripheral blood should be observed and considered, though no security should be taken if the blood count and the differential fail to fit into the picture. In the interpretation of differential counts, it is necessary to consider the normally higher per cent of lymphocytes in children under 5 years of age⁽⁵⁾.

Signs: Pain is the most consistent sub-

jective symptom, and *tenderness* the most common objective sign. Tenderness is elicited in practically all patients with appendicitis, and the point of maximum tenderness in the great majority of cases (84 per cent in Hudson's and Chamberlain's series) is in the right lower quadrant. Many have generalized tenderness, and others have it located in the lower portion of the abdomen. In some few, tenderness can be found only by rectal examination. Just as the appendix may have variable anatomic locations so also may the areas of tenderness vary. *Rebound tenderness* is important, when present, but not essential to the diagnosis.

Muscular rigidity or spasm is the second most common sign. "The ability to detect slight degrees of muscle spasm or resistance and to distinguish between voluntary and involuntary spasm is dependent on a careful, unhurried, and gentle examination and on the experience of the examiner. There may be difficulty in distinguishing the voluntary spasm associated with intra-abdominal inflammation from the voluntary splinting accompanying pneumonia or diaphragmatic pleuritis"⁽⁵⁾.

Rectal examination is certainly one of the most important phases of the study of a child with abdominal pain and vomiting. Many will complain of tenderness, but positive findings often provide the diagnosis. The area covered on digital examination of a child's rectum is rather extensive as compared with that of an adult. In a small percentage of cases a diagnosis cannot be made except by rectal examination. A mass felt on rectal examination is as important as one palpated within the abdomen. The records reviewed infrequently referred to the psoas sign, cremasteric reflex, or areas of hyperesthesia. It was often noted that the right thigh was flexed on the abdomen. I believe that many diagnoses of acute appendicitis and other conditions are reached by an intuitive sense on the part of many surgeons. Certainly intuition plays its part in helping a surgeon reach a decision.

Fluid and electrolyte balance

Baffles states that:

"replacement of fluids and electrolytes has become an integral part of adequate preoperative and postoperative management. Present methods of determining fluid and electrolyte requirements have one universal disadvantage

—they are estimates and must be supplemented by clinical judgment. They may not be entirely reliable for rigid management of fluid balance in diseased patients. These estimates are based on periodic study of blood samples. Since blood constitutes only 5 per cent to 8 per cent of body weight its analysis can only be an estimate of the myriad changes going on throughout the rest of the body. . . . Fluid and electrolyte calculations should not be applied without being evaluated in the light of several daily clinical observations which include measurement of weight and temperature changes and a careful record of daily intake and output, as well as periodic examinations of blood and urine."⁽⁶⁾

It appears that much of the control of fluid balance and electrolytes in our three hospitals has been done largely on an empirical basis.

The disturbances associated with acute appendicitis vary greatly, but most physicians are aware that the loss of fluids and electrolytes among patients so afflicted is from the gastrointestinal tract, predominantly in gastric juice and occasionally from the colon as a result of diarrhea.

"The chief cation in gastric juice is hydrogen except in achlorhydria. The milliequivalent concentrations of sodium and potassium are relatively small and almost equal. The major anion, on the other hand, is chloride. Bicarbonate ion concentration is very small. When large amounts of gastric juice are lost, the major electrolyte loss to the body consists of acid and chloride ions. Hypochloremic alkalosis results. Hypokalemia also occurs because a large proportion of the lost fixed base is potassium. In order to reverse the metabolic disturbances following loss of gastric juice, fluid therapy should include ammonium chloride, potassium chloride and saline, with enough 5 per cent dextrose in distilled water to correct dehydration."⁽⁶⁾

The minimum total daily requirements in infants and small children is usually 60 cc. per pound of body weight, and in the newborn 45 cc. There is a persistent danger of overhydration, especially in premature babies.

Antibiotics and chemotherapy

Certainly the mortality in appendicitis has been reduced greatly by the availability of the current treasure chest of medicines. Penicillin is used often, but should not, I think, be routinely prescribed. Penicillin, streptomycin, and Achromycin are the drugs we use most often. These and other

agents are generally well tolerated by the child. The power of antibiotics should not make us feel complacent in the management of acute appendicitis, however.

Anesthesia

Two anesthesiologists are available in our community, and they capably employ all forms of anesthesia. At our Negro hospital a practical anesthetist, intern, resident, or doctor has given the anesthesia. Nurse-anesthetists have cared for the majority of patients. The ideal state of affairs is yet to be attained, but the newer conception and practice of anesthesiology as applied to infants and children have relieved the surgeon of his former added burden. The open drop method is more frequently used, and its range of safety is greater, particularly in unskilled hands. Sodium Pentothal for induction, nitrous oxide, ether, and cyclopropane are used in the older children. Spinal anesthesia is occasionally employed. Constant attention to the unconscious patient, with maintenance of adequate exchange, noting any alteration in the circulation or respiration, have been stressed. Generally the more simple, uncomplicated techniques have been used, and the agents which provide the widest range of safety have been administered.

Tender surgical care

Children and infants surely merit a tenderhearted and considered approach by their surgeon. Confidence and friendship can be gained by unhurried examinations. Proper preoperative treatment helps make them safe for surgery. Adequate preoperative medication allays the anxiety of the child in abnormal surroundings. Modern anesthesia provides the surgeon with the most favorable conditions to insure the success of his efforts. Control of fluid and electrolyte balance while using the antibiotics at hand today give results considered miraculous a quarter century ago.

In the treatment of children with appendicitis and other conditions we can well bear in mind the editorial words of Dr. Willis J. Potts when he said, "If the newborn child, unfortunately born with a congenital deformity, could reason and speak it would beg imploringly, 'Please, Mr. Surgeon, exercise the greatest gentleness with my miniature tissues, and try to correct the deformity at the first operation. You know, I hope to use these parts of my anatomy for the next 67 years. Give me blood and the proper amount of fluid and electrolytes; give me plenty of oxygen with the anesthesia and I will show you that I can tolerate a terrific amount of surgery. You will be surprised at the speed of my recovery and I shall be always grateful to you.'"

Summary

1. Appendicitis in children has been discussed. Three hundred fifty-eight cases of acute appendicitis in children 12 years or less with no deaths are reported from our community.
2. The symptoms and signs have been reviewed.
3. Fluid and electrolyte balance have been considered.
4. The simplicity of anesthetic technique and careful observation of the unconscious patient have been stressed.
5. Gentleness on the part of the surgeon has been urged.

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If 1915 mortality rates had prevailed last year, Health Information Foundation points out, an additional 300,000 of the four million babies born alive would not have lived to celebrate their first birthday.

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MAY, 1957

THE ASHEVILLE MEETING

For the first time since 1936 the Medical Society of the State of North Carolina met in Asheville, May 5-8. The meeting was noteworthy for many reasons. Asheville gave the Society such a royal welcome that the Nominating Committee has recommended that we go back again next year.

The weather was pleasant. The attendance was better than expected, 867 doctors and a total registration of 1,561. The City Auditorium afforded excellent facilities for the exhibits, both scientific and technical. The Assembly Room offered ample room for the General Sessions and the President's Dinner and Ball. The headquarters hotels—the George Vanderbilt and Battery Park—were conveniently near the

Auditorium, and between them provided excellent accommodations for the House of Delegates, the various section meetings, and for the alumni luncheon and dinner meetings. It was a pleasure to listen to the speakers without the annoyance of extraneous noise.

As in all cities, parking was a problem, but the number of convenient parking lots helped the situation.

Although the meeting place had been changed in order to allow Negro physicians to attend, it was rather disappointing that only two or three of our colored colleagues were seen.

As in previous meetings, the American Medical Association was well represented. Secretary and General Manager George Lull—now one of our honorary members—and Dr. F. J. L. Blasingame of the Board of Trustees, spoke before the Second General Session. Mr. Leo Brown, director of public relations, addressed the First General Session. Dr. Frank S. Crockett, chairman of the A.M.A. Committee on Rural Health, and Dr. Frank Wilson, formerly head of the A.M.A.'s Washington Bureau—and also an honorary member of our State Society—were welcome visitors.

A number of distinguished guests added greatly to the scientific program.

The Memorial Service Sunday night, presided over by Dr. Charles H. Pugh, was, as always, quite impressive. The address by the Rev. Embree H. Blackard was an eloquent argument for immortality.

The Officers' Breakfast was unusually well attended, and those present were rewarded for getting up early by an excellent address, "Political Stew," by Dr. Walter L. Porteus, past president of the Indiana State Medical Association. This is to be published in an early issue of the NORTH CAROLINA MEDICAL JOURNAL.

The audio-visual program has been increasingly popular. An innovation this year was the Five-State Videoclinic, "The Physician and Emotional Disturbances," which was presented in the Assembly Room Monday from 2:00 to 3:00 P.M. The opening of the afternoon session of the House of Delegates was postponed an hour to allow members to attend this program.

The House of Delegates met in a special called session at 10:00 A.M. Monday to act upon certain changes in the Constitution

and By-Laws, so that they would be effective during the regular sessions. These changes are to be found in the 1956 Transactions, and will not be repeated. Perhaps the most important one provided that the report of the Nominating Committee and the election of officers should take place in the first meeting of the House of Delegates. This amendment met with general approval.

The House voted Monday evening to approve a resolution presented by Dr. Klostermyer of Asheville to change the much discussed "Doctors' Plan" insurance policy from a service to an indemnity payment, so that the payment for service rendered would not necessarily cover the whole amount charged the patient. Many voted for the resolution without realizing that it would nullify the 50,000 or more policies already sold by the Hospital Saving Association. So much opposition developed afterwards that the matter was reopened in the Wednesday afternoon session. After a motion to reconsider the action was passed by a good majority, another motion was made to refer the matter back to the Insurance Committee for further consideration of a deductible plan, with instructions to report to the House of Delegates next year. After considerable discussion the motion was passed, also by a good majority.

Another controversial matter was settled temporarily when the Executive Council voted to postpone action on the proposed Headquarters Building for another year.

Dr. Willard C. Goley of Graham was elected General Practitioner of the Year. He and the other two men nominated — Drs. John Foster of Sanford and John D. Robinson of Wallace—can all be proud of the high esteem in which they are held by their patients and colleagues.

Dr. Koonce's farewell address, given before the First General Session, is given first place in this issue. Dr. Schoenheit's address before the Second General Session, with his picture, is to appear in the June issue. Both these addresses will bear reading and re-reading.

The report of the Nominating Committee was adopted unanimously and heartily. Dr. Lenox Baker, professor of orthopedic surgery at Duke, is president-elect. Other officers elected are: Drs. George Holmes of Winston-Salem and Amos Johnson, of Gar-

land, vice presidents; Drs. Charles Bugg of Raleigh, John R. Bender of Winston-Salem (whose term expired), and Roger W. Morrison of Asheville, members of the State Board of Health; Dr. G. Westbrook Murphy of Asheville, speaker of the House of Delegates.

Dr. Koonce has given freely of his time, energy and ability to make his administration a notable one. The membership of the Society was the highest in history on December 31—3,058. And we can look forward with confidence to continued progress under the leadership of President Schoenheit and President-Elect Baker.

* * *

EDITORIAL NOTES

The President's Night was quite a success. The Assembly Hall provided for more guests than ever before. The food was excellent and well served. Dr. Graham Barefoot was an ideal toastmaster. The oath of office was administered by Dr. Koonce to Dr. Schoenheit, who then gave a brief but appropriate address of acceptance. The Honorable Donald Buck, mayor of Allentown, Pennsylvania, gave an address that was both entertaining and stimulating.

The M.C. of the floor show was most versatile: comedian, magician, musician, and dancer. The orchestra was rather partial to the rock 'n' roll type of music, but the dancing continued until the wee small hours.

* * *

For the first time within the memory of many members, Dr. Roscoe McMillan did not attend the annual meeting. He was convalescing from a recent operation, but sent a telegram of greeting and good wishes.

* * *

Asheville offered many advantages to offset its more unfavorable location. The auditorium was ideal for the exhibits, general sessions, and the President's Night program. The hotels gave excellent food and service.

* * *

It was quite appropriate for Dr. Schoenheit to be installed as president in his own home town, and for another Asheville citizen, Dr. Westbrook Murphy, to be speaker of the House of Delegates. Dr. Murphy has made such a good record that his re-election was a foregone conclusion.

BULLETIN BOARD

COMING MEETINGS

North Carolina State Board of Medical Examiners, written examination—Sir Walter Hotel, Raleigh, June 17-20; meetings to interview candidates for licensure by endorsement—Sir Walter Hotel, Raleigh, June 18, and Blowing Rock, July 26.

Mountaintop Medical Assembly — Waynesville, June 20-22.

American College of Chest Physicians, Annual Meeting—Hotel Commodore, New York City, May 29-June 2.

American Medical Association, One Hundred Sixth Annual Meeting—New York City, June 3-7.

Harvey Tercentenary Congress—Royal College of Surgeons, London, England, June 3-7.

Fourth International Poliomyelitis Congress — Geneva, Switzerland, July 8-12.

Institute of Industrial Health, course in radiation for physicians and surgeons—University of Cincinnati, September 9-15.

American College of Gastroenterology, post-graduate course—The Somerset, Boston, October 24-26.

Association of Military Surgeons, Sixty-fourth Annual Meeting—Hotel Statler, Washington, D. C., October 28-30.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

The University of North Carolina School of Medicine presented Distinguished Service Awards to 12 Tarheel citizens at ceremonies recently. Recipients of the awards, given annually to persons making outstanding contributions to the field of medicine or to the Medical School, were Harry B. Caldwell, Greensboro; W. D. Carmichael, Jr., Chapel Hill; James H. Clark, Sr., Elizabethtown; Irving Carlyle, Winston-Salem; Hyman L. Battle, Rocky Mount; Benjamin Cone, Greensboro; Isaac G. Greer, Chapel Hill; George Watts Hill, Sr., Durham; Kay Kyser, Chapel Hill; C. Knox Massey, Durham; John L. Moorhead, Durham; and Clarence Poe, Raleigh.

All 12 were associated in an official capacity with the beginning of the Good Health Program and the Good Health Association in North Carolina. The work led to the establishment of the University of North Carolina Medical School and Division of Health Affairs.

The awards were presented by Chancellor Robert B. House.

* * *

Dr. W. R. Stanford of Durham was named president-elect of the University of North Carolina Medical Alumni Association, to take office a year from now, at the annual meeting of the Alumni Association in Chapel Hill recently.

Other officers elected were Dr. C. C. Henderson of Mount Olive, vice president; Dr. Robert Andrews of Roxboro, secretary; and Dr. Hugh McAllister of Lumberton and Dr. Lester Crowell of Lincolnton, counselors.

President-Elect Dr. Milton S. Clark of Goldsboro was installed for the coming year during the meeting.

The day-long alumni day program also included five class reunions of the School of Medicine. These were the classes of 1907, 1917, 1927, 1937 and 1947. The dinner speaker was Dr. Walter S. Wiggins, associate secretary of the Council on Medical Education and Hospitals of the American Medical Association. Dr. Milton S. Clark presided at the session.

The morning session of the program consisted of activities in the various clinical departments of the School of Medicine.

A luncheon and business meeting was held at midday at the Carolina Inn. Dr. Ralph Morgan of Sylva, vice president of the Alumni Association, presided. The principal speakers were Dr. Paul F. Whitaker of Kinston, president of the North Carolina Medical Foundation, and Dr. W. Reece Berryhill, Dean of the School of Medicine.

A scientific session was held in the afternoon with Dr. Fred Patterson of Chapel Hill presiding. Appearing on the program were Dr. Robert Winters, UNC; Dr. E. A. Rasberry, Jr., Wilson; Dr. George T. Wood, Jr., High Point; Dr. Nathan A. Womack, UNC; Dr. John T. Sessions, Jr., UNC; Dr. E. T. Beddingfield, Jr., Stantonsburg; Dr. George M. Cooper, Jr., UNC; and Drs. Eugene Hargrove and James E. Somers of UNC.

* * *

More than 400 persons from throughout North Carolina attended the first annual Parents' Day held recently by the University of North Carolina School of Medicine.

During the day-long program, the UNC Medical Parents' Club was organized and officers were elected. The general officers are V. G. Herring, Jr., Goldsboro, president; John S. Patterson, Washington, D. C., first vice president; Dr. Palmer A. Shelburne, Greensboro, second vice president; and Dr. S. E. Howie, Fayetteville, secretary.

The state was divided into five regions, and a chairman and vice chairman were elected for each region. The regions were numbered one through five, Region 1 being in the extreme eastern part of the state and Region 5 in the extreme west.

Region officers elected were: Region 1, Dr. John C. Tayloe, Washington, chairman; Mrs. R. J. Mooring, La Grange, vice chairman; Region 2, Dr. Charles P. Eldridge, Raleigh, chairman; S. G. Jenkins, Tarboro, vice chairman; Region 3, Dr. Shahane R. Taylor, Greensboro, chairman; Mrs. P. D. McMichael, Reidsville, vice chairman; Region 4, J. P. Hobson, Charlotte, chairman; D. S. Menzies, Sr., Hickory, vice chairman; Region 5, Dr.

Alfred W. Hamer, Morganton, chairman; Zebulon Weaver, Jr., Asheville, vice chairman.

Purpose of the Parents' Club is to keep all parents of medical students informed about the total program of the School of Medicine. One of the goals of the club is to give ample opportunity to all parents of medical students to participate in the activities of the school. It is not a fund raising organization.

* * *

The United States Public Health Service has made a two-year grant of \$19,768 to Dr. Walter R. Benson of the University of North Carolina School of Medicine.

The funds will be used for a study of disturbances in amino acid metabolism. A total of \$9,993 will be expended in the first year of the work, and the remainder of the sum will be used during the second year.

The research project will deal with the effects of disturbance of amino acid metabolism on protein formation growth and tumor formation in animals. Dr. Benson actually began this work about three years ago. However, this grant will make an accelerated study possible.

Dr. Benson received his M. D. from Duke University and joined the faculty of the University of North Carolina School of Medicine last year. He is an assistant professor in the Department of Pathology.

* * *

Four faculty members of the University of North Carolina School of Medicine have accepted invitations to become charter fellows in the American Academy of Microbiology.

They are Dr. William J. Cromartie, associate professor of bacteriology and medicine and director of the Bacteriological and Serological Laboratories; Dr. Edward C. Curnen, professor and chairman of the Department of Pediatrics; Dr. Daniel A. MacPherson, professor and chairman of the Department of Bacteriology and Immunology; and Dr. G. P. Manire, associate professor of bacteriology.

The new organization is sponsored by the American Society of Bacteriologists. The academy is to be made up of well qualified microbiologists in all branches of science throughout the United States and Canada. The members must have a minimum of seven years of postdoctorate study or practice in microbiology.

* * *

The National Institute of Allergy and Infectious Diseases of the U. S. Public Health Service has granted \$94,010 to Dr. William J. Cromartie of the University of North Carolina School of Medicine. The money will be used for a five-year study of bacterial infections of the kidney.

Specific objectives of the proposed studies are the development of precise methods of diagnosing chronic infections of the kidney, determining the

relative importance of such infections as a cause of kidney failure and high blood pressure, and determination of the best methods of treating chronic infections of the kidney.

Dr. Cromartie is a native of Garland. He attended Presbyterian Junior College, the University of North Carolina, and the University of Alabama. His M.D. degree was awarded by Emory University in 1937. Before coming to the University of North Carolina School of Medicine in 1951, he had taught at Vanderbilt University, Southwestern Medical College, and the University of Minnesota. He served in the Army during World War II.

* * *

The fifth annual program in general medicine was held at the University of North Carolina School of Medicine Tuesday and Wednesday, April 16-17.

Tuesday's session was devoted to disorder of the thyroid gland. Taking part in this day-long session were Drs. Charles H. Burnett, Judson Van Wyk, Walter Hollander, Jr., T. Frank Williams, Colin G. Thomas—all of the University of North Carolina School of Medicine; Dr. Sidney C. Werner, Columbia University College of Physicians and Surgeons; and Dr. Frank Engel, Duke University School of Medicine.

Wednesday morning's session was devoted to a seminar on pediatric hematology. Those taking part in this program were Dr. Eugene Kaplan, Mt. Sinai Hospital, Baltimore; Dr. Jeffress G. Palmer, UNC; and Dr. Doris A. Howell, Duke University School of Medicine.

Wednesday afternoon's session was on pulmonary problems. Physicians appearing on this session were Dr. A. Derwin Cooper, UNC School of Medicine; Dr. William B. Peck, North Carolina State Board of Health; Dr. Willard C. Hewitt, North Carolina Sanatorium, McCain; and Drs. Thomas B. Barnett, Richard M. Peters, and Dr. William H. Sprunt—all of the University of North Carolina School of Medicine.

The annual Phi Chi Medical Lecture at 4:00 p.m. on Wednesday closed the two day meeting. This lecture was delivered by Dr. David A. Cooper, professor of clinical medicine, University of Pennsylvania Graduate School of Medicine. Dr. Cooper, a University of North Carolina graduate of 1919, spoke on "Bronchogenic Carcinoma."

* * *

A regional conference of the American Academy of Pediatrics was held at the University of North Carolina School of Medicine recently.

Some 28 physicians from five southern states attended the conference. The regional meetings are held each year at some school of medicine in each region.

This meeting was sponsored by the Department of Pediatrics of the School of Medicine. The chairman of the conference was Dr. Weston M. Kelsey

of the Bowman Gray School of Medicine in Winston-Salem.

The teaching plans of the various schools in the region were discussed. Conference subjects included various aspects of pediatric education, from the undergraduate level through the post-graduate level.

Aside from representatives from North Carolina Medical Schools, schools from Virginia, South Carolina, Georgia, and Florida were also represented.

* * *

Dr. Gordon Rader has joined the staff of Psychological Services at North Carolina Memorial Hospital of the University of North Carolina.

He also has a joint appointment as assistant professor of psychology in the Department of Psychology and Psychiatry.

Dr. Rader attended Queen's College in Flushing, New York, and completed his undergraduate work at the University of Washington in Seattle.

He received his Ph.D. degree at Yale University in 1956 and held a position as clinical psychologist at the VA Hospital in Roanoke, Virginia, before coming here.

Dr. Tihamer Z. Csaky, associate professor of pharmacology of the University of North Carolina School of Medicine, has been granted a Guggenheim Fellowship for research study.

Dr. Csaky said yesterday he would sail for Copenhagen, Denmark, next spring to work with Professor Hans Ussing at the Institute of Biological Isotope Research. His work will be in the field of mechanisms of active transport in biological systems.

While in Europe, Dr. Csaky plans to attend the International Biochemical Congress in Vienna, Austria, and visit various laboratories in Finland, Switzerland, Germany and England, where he has engaged in research in the past and where work similar to his is being conducted.

The fellowships are granted to persons who have demonstrated their ability for scholarly research and to persons of proven creative ability in fine arts.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST COLLEGE

Through the assistance of the Pediatrics Educational Fund of the Mead-Johnson Company, it has been possible to sponsor two visiting professors of pediatrics. Dr. Horace Hodes, director of the Department of Pediatrics at Mt. Sinai Hospital and clinical professor of pediatrics at Columbia University College of Physicians and Surgeons, held teaching rounds and conferences with medical students and members of the house staff March 28-30.

* * *

The Bowman Gray School of Medicine has again benefited through the program of the Ford Foundation. In the fall of 1956 the school of medicine was one of 44 privately endowed schools to receive sums of \$500,000 each. In late March the pro rata distribution of the remainder of the \$90,000,000 Ford program was announced, and Bowman Gray is scheduled to receive an additional \$1,200,000. In compliance with the provisions of the grant, the entire sum will be invested for a minimum of 10 years, during which time the income will be used for the exclusive purpose of strengthening the instructional budget of the school. None may be used for construction or research. The receipt of these funds comes at a propitious time, and will aid greatly in meeting needs now apparent.

* * *

Recently there have appeared in the *Journal of the American Medical Association* reviews of two books written by members of the faculty: *Roentgen Signs in Clinical Diagnosis* by Dr. Isadore Meschan, professor and director of the Department of Radiology at the Bowman Gray School of Medicine; and *Atlas of Tumors of the Nervous System* by Dr. H. M. Zimmerman, chief of laboratory division, Montefiore Hospital; Dr. Martin G. Netsky, professor of neuropathology, Bowman Gray School of Medicine; and Dr. Leo M. Davidoff, attending neurosurgical surgeon, Montefiore Hospital. Dr. Meschan's book is described as ". . . the most complete textbook of roentgenographic diagnosis ever published. . ." And of the Atlas, the reviewer states, "There is nothing quite comparable to it in print today. . ."

* * *

Dr. Eben Alexander, Jr., professor of neurosurgery, delivered the keynote address at the second annual Rehabilitation Workshop. About 130 persons from throughout the state attended the three-day meeting conducted by the North Carolina State College Department of Occupational Information and Guidance.

Dr. Alexander also attended the meeting of the Southern Neurosurgical Society in Nashville, Tennessee, where he presented a paper, "Hyperextension Injuries of Cervical Spine."

* * *

At the fifth annual meeting of the North Carolina Academy of Science held at Wake Forest College in early May, members of the faculty of the Department of Biochemistry presented papers before the biochemistry and physiology section: "The Control of the Phosphorylative Rate in Washed Rat Liver Mitochondria," Dr. Marjorie A. Swanson, associate professor of biochemistry; "A Further Study of the Action of Diethanolamine on Liver Lipids," Dr. Camillo Artom, professor and director of the Department of Biochemistry, and Dr. Hugh B. Lofland, instructor in biochemistry; "A Trimethylamine Yielding Compound Procluded

from Choline in Rat Liver Preparations," Dr. Hugh B. Lofland and Dr. Camillo Artom.

* * *

Three members of the Department of Anatomy attended the annual meeting of the American Association of Anatomists in Baltimore. Dr. Warren Andrew, professor and director of the Anatomy Department, presented a paper, "A Visit to Professor Oskar Vogt," and a demonstration concerning the activity of lymphocytes in intestinal mucosa. Dr. Norman Sulkin, associate professor of anatomy, presented a demonstration, "Mucoproteins in the Urinary Tract of Man in Health and Disease," a work which he conducted jointly with Dr. William H. Boyce, assistant professor of urology. Dr. Charles E. McCreight, instructor in anatomy, also attended the meeting.

* * *

The faculty and staff of the Department of Radiology, together with the faculty and staff of the Section on Gastroenterology, has been awarded a research grant for investigation of the pancreas, in relation to certain projected radiographic studies and radioisotope studies.

* * *

Dr. Wingate M. Johnson, emeritus professor of internal medicine, attended the regional meeting for Texas and Southwestern States, Committee on Aging of the American Medical Association, in Dallas, where he delivered a paper, "Geriatric Training in Medical Schools." He also delivered the postgraduate lecture for general practitioners of the Texas State Medical Society on "Management of Nervous Patients."

* * *

Dr. E. D. Churchill, Boston, spoke on "Wounds and Wound Healing" before the Sigma Xi Club and the Bowman Gray Medical Society, at one of their recent joint meetings.

* * *

Dr. Robert L. McMillan, professor of clinical internal medicine, spoke on coronary diseases recently at a postgraduate course in medicine for Catawba County physicians.

NORTH CAROLINA SURGICAL ASSOCIATION

The North Carolina Surgical Association held its spring meeting at The Homestead, Hot Springs, Virginia, on March 22, 23, and 24.

The program consisted of papers by Dr. Louis Shaffner on "Imperforate Anus," by Dr. H. Max Schiebel on "Congenital Megacolon," by Dr. George W. Paschal on "Appendicitis in Children," by Dr. Graham Jarman on "Undescended Testis," by Dr. Warner Wells on "Peripheral Nerve Repair," by Dr. Raymond Postlethwait on "Tendon Repair," and brief discussions by Dr. Edward W. Phifer, Dr. Hubert Poteat Jr., and Dr. Felda Hightower on "Little Things Learned in Practice."

NORTH CAROLINA STATE BOARD OF HEALTH

Farming ranks as North Carolina's most hazard occupation, according to figures released recently by the Accident Prevention Section of the North Carolina State Board of Health.

Dr. Charles Cameron, Jr., the Board of Health's consultant in home and farm safety, said that 104 residents of the Tar Heel state died in farm mishaps during 1956 to rank farming as the single occupational group with the highest fatal accident experience.

"During the same period approximately 130 other persons died in all other types of occupational accidents combined," Dr. Cameron said. "Drowning on the farm is the single most frequent fatal accident recorded during the past year."

The accident report, prepared as part of the Board of Health's continuing analysis of accidents in the state, showed a total of 35 drownings on farms with 24 of the drownings reported as having occurred in "farm ponds," or irrigation ponds. Over half the drowning victims were under 15 years of age with the majority involving males between the ages of 5 and 14 years of age.

Accidents involving machinery took the lives of 28 residents to rank as the second most frequent cause of accidental death. Firearm mishaps cost 11 lives, and being struck by falling objects claimed an additional nine lives.

"The Board of Health recognizes the importance of the farm pond in the agricultural economy of the state, but feels that farm residents need to be alerted to the high frequency with which persons are drowned in ponds and irrigation lakes," Dr. Cameron said.

NORTH CAROLINA STATE BOARD OF MEDICAL EXAMINERS

The North Carolina State Board of Medical Examiners will meet at the Mayview Manor, Blowing Rock, North Carolina, Friday, July 26, 1957, at which time applicants for licensure by endorsement will be interviewed.

ROBESON COUNTY MEDICAL SOCIETY

The Robeson County Medical Society and the Robeson County Heart Association sponsored a Heart Symposium at the Pine Crest Country Club, Lumberton, on March 27. Sixty-six doctors were present for the scientific meeting and 110 for the banquet.

The Robeson County Medical Society held its President's Dinner and meeting April 1 at the Lorraine Hotel, Lumberton. A social hour and fine steak dinner were provided with the compliments of the president, Dr. T. H. Mees of Lumberton. Dr. R. A. Ross, professor of obstetrics and gynecology, University of North Carolina Medical School, gave a talk on the medical program in North Carolina.

ASSOCIATION OF MILITARY SURGEONS

The sixty-fourth annual convention of the Association of Military Surgeons of the United States will have as its theme, "Professional Excellence—The Criterion of Military Medicine." The convention will be held at the Hotel Statler in Washington, D. C., October 28-30, 1957.

Originally, the association was organized to work for the "advancement of military and accidental surgery and all things pertaining to the health and welfare of the civilian soldier," and was restricted to membership by medical officers of the National Guard. Although the objectives of the organization remain the same, membership is now open to all present and former officers of the Medical, Dental, Veterinary, Medical Service, Nurse, and Medical Specialist Corps of the Army, Navy and Air Force, as well as personnel from the Public Health Service and Veterans Administration.

INSTITUTE OF INDUSTRIAL HEALTH

A one-week course in radiation for industrial physicians and lawyers will be offered by the Institute of Industrial Health and the College of Law of the University of Cincinnati during the week of September 9.

Classes will be held at the Colleges of Medicine and Law of the University of Cincinnati. Enrollment will be limited. Tuition is \$100.00 per person. For further information and application write: Secretary, Institute of Industrial Health, Kettering Laboratory, College of Medicine, University of Cincinnati, Cincinnati 19, Ohio.

AMERICAN COLLEGE OF GASTROENTEROLOGY

The American College of Gastroenterology has announced that its annual course in postgraduate gastroenterology will be given at The Somerset in Boston, Massachusetts, on October 24, 25, 26.

The course will again be under the direction and co-chairmanship of Dr. Owen H. Wangensteen, professor of surgery of the University of Minnesota Medical School, who will serve as surgical co-ordinator, and Dr. I. Snapper, director of Medical Education, Beth-El Hospital, Brooklyn, New York, who will serve as medical co-ordinator. Drs. Wangensteen and Snapper will be assisted by a distinguished faculty selected from the medical schools in the Boston area.

The course will cover, essentially, the advances in diagnosis and treatment of gastrointestinal diseases, and a comprehensive discussion of diseases of the mouth, esophagus, stomach, pancreas, spleen, liver and gallbladder, colon and rectum, with special studies of radiology and gastroscopy.

For further information and enrollment write to the American College of Gastroenterology, 33 West 60th Street, New York 23, New York.

LIFE INSURANCE MEDICAL RESEARCH FUND

Three North Carolina medical schools are among institutions receiving grants for heart research this year by the Life Insurance Medical Research Fund, according to an announcement by Dr. Francis R. Dieuaide, Scientific Director of the Fund.

In all, the Fund has given \$9,211,000 for heart research since it was organized in 1945, including the 1957 awards of \$1,059,490.

In announcing this year's awards, Dr. Dieuaide said they would support scientists in a broad attack on the vital problem of heart disease. Prominent among the subjects of study are diets, stress, and other factors in hardening of the arteries, coronary occlusion, and high blood pressure.

In other programs, new methods are being developed for the improvement of cardiovascular surgery, and for its extension to conditions which up to now have been considered inoperable.

The North Carolina institutions benefiting from the awards are:

Bowman Gray School of Medicine of Wake Forest College, for research by Dr. Harold D. Green on blood flow in the brain, \$19,800.

Duke University School of Medicine, for research by Dr. Philip Handler on the pressor factor in normal human urine, \$5,500.

University of North Carolina School of Medicine, for research by Dr. Carl E. Anderson on the chemistry and metabolism of acetal phosphatides, \$15,400.

NEWS NOTES FROM THE AMERICAN MEDICAL ASSOCIATION

New "A.M.A. In Action" Booklet

An attractive new booklet describing "A.M.A. in Action" as it moves ahead toward better medicine, better patient care, better distribution of medical services, better informed public, and better public health will be off the presses in June. This 44-page, illustrated pamphlet points out various A.M.A. services for physician-members and the public and lists benefits to both the medical profession and the general public. Copies will be sent to A.M.A. officers, trustees and delegates, national opinion leaders, medical schools, and pharmaceutical representatives. In addition, limited quantities will be made available to state and county medical societies for distribution to their key officials.

Professional Liability Film Available In July

A new dramatic film pointing up ways of preventing professional liability claims and suits will be available July 1 for medical society meetings. This new film, entitled "The Doctor Defendant," is a companion film to "The Medical Witness" in the series of films on various medico-legal problems being produced by the Wm. S. Merrill pharmaceutical company in cooperation

with the American Medical Association and the American Bar Association. Bookings may be arranged through A.M.A.'s Film Library, 535 North Dearborn Street, Chicago, Illinois. It will be shown for the first time Wednesday, June 5, during the A.M.A.'s annual meeting in New York City.

Radio Stations Airing A.M.A. Health Programs to be Honored

Eighty-seven radio stations across the country will be honored by the American Medical Association this year for broadcasting a minimum of 10 complete A.M.A. health education radio transcriptions within the past five years. Since 1954, a total of 265 radio stations throughout the United States and Alaska have qualified for this distinction. Many of the radio stations using A.M.A. electrical transcriptions are serviced directly from the Bureau of Health Education through county medical societies. In addition, 13 state medical societies function as state distributors, arranging the placement of these programs directly with stations in their areas.

Nationwide Health Survey Launched

A new National Health Survey is being instigated in May by the U. S. Public Health Service, according to A.M.A.'s Council on Medical Service. The Council reports that a household interview survey is being conducted in 330 sampling areas throughout the country. Legislation enacted during the last session of Congress authorized the Surgeon General of the USPHS to make surveys and special studies of the United States population to determine the extent of illness and disability and related information.

The Council stated that the American Medical Association supported this legislation while cautioning that any survey in this area should be conducted in such a manner that all interested parties can agree substantially with its conclusions.

Facts to be collected include statistics on the number, age, sex, and other personal characteristics of persons suffering from diseases, injuries, or handicapping conditions; the length of time that these people have been prevented from carrying on their usual activities, and whether or not the conditions have had medical attention.

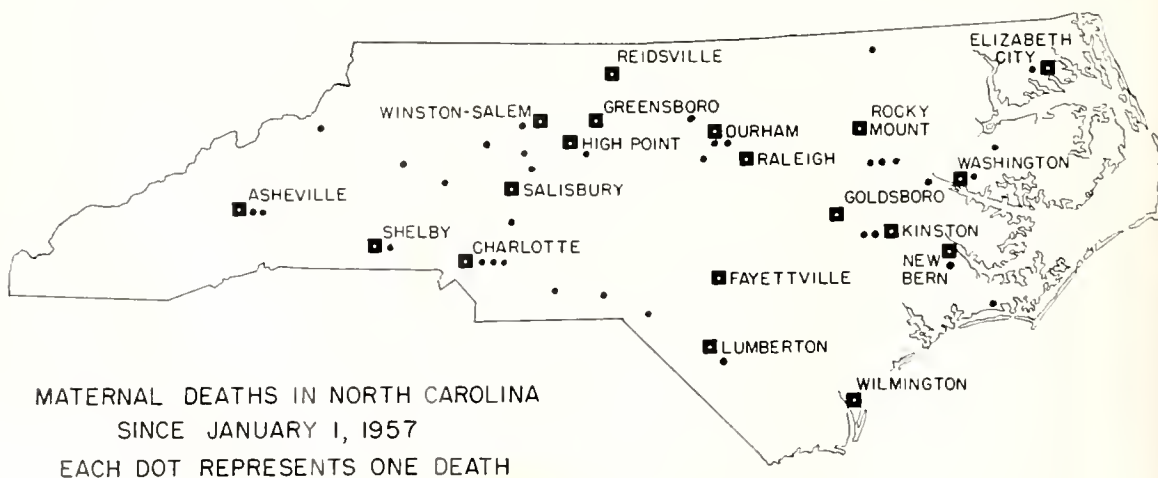
The Council also announced that the household interview phase of the survey is to be a continuing study for an indefinite period of time. Field work will be handled by the Bureau of the Census for the USPHS, following primary sampling units already established in counties, parts of counties, combinations of counties, or metropolitan areas. At least one sampling unit is located in every state.

TOBACCO INDUSTRY RESEARCH COMMITTEE

New appropriations of \$700,000 for research into tobacco use and health raise to \$2,200,000 the funds provided by the Tobacco Industry Research Committee since its start in 1954, chairman Timothy V. Hartnett announced recently.

From these funds, research grants of over \$566,000 were awarded during 1956 upon recommendation of the Scientific Advisory Board to the Committee, Mr. Hartnett said. More than 60 independent scientists working in hospitals and research institutions throughout the country are now carrying forward their medical research under Tobacco Industry Research Committee grants which total \$1,380,000 since late 1954.

All research grants are made by the Committee upon advice from the Scientific Advisory Board, a group of nine doctors, educators and research scientists headed by Dr. Clarence Cook Little, founder of the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine. This Board has been given full freedom in research policy and programming.



ANNUAL MEDICAL GOLF TOURNAMENT

The American Medical Golfing Association will hold its forty-first tournament June 3, at the well known Westchester Country Club, Rye, New York.

All male members of the American Medical Association are eligible to participate. Notice of further details and advance registration card may be secured by writing Bob Elwell, 3101 Collingwood Boulevard, Toledo 10, Ohio.

Players should present verification of their home club handicap, signed by their club secretary; otherwise, handicap is set by the A.M.G.A. Handicap Committee.

PAN AMERICAN SANITARY BUREAU

A check for \$100,000 was handed recently to Dr. Fred L. Soper, Director of the Pan American Sanitary Bureau, Regional Office of the World Health Organization, by the Ambassador of the Dominican Republic to the United States, His Excellency Joaquin E. Salazar.

This money is the first installment of a \$500,000 contribution of the Dominican Government for the Special Fund for Malaria Eradication of the Pan American Sanitary Organization. It is the second contribution to the Special Fund, the first, in the amount of \$1,500,000 having been made last month by the Government of the United States.

With an estimated eight million cases of malaria yearly in the Americas, the definitive solution of this problem has been given first priority in the public health programs furthered by the Bureau in cooperation with governments. Considering the tendency of malaria-transmitting mosquitoes to develop resistance to the residual insecticides such as DDT, it is essential that eradication be completed with all speed before such resistance develops. Governments are being urged to establish full-scale eradication programs as rapidly as possible.

The Month in Washington

By approximately the mid-term point in its first session, the Eighty-fifth Congress had shown enough interest in health legislation to hold a variety of hearings, but there was no evidence that many major bills would be passed before adjournment.

Actually, it was not until three months after the session opened that the Administration sent up to Congress two bills it regards as important. One would change the doctor draft act and the other would authorize small commercial companies to pool part of their resources to stimulate expansion and experimentation in health insurance.

Even then, the Department of Health, Education, and Welfare had not released its draft of legislation for federal grants to medical, dental, and osteopathic schools for construction and equipment. There was some reluctance to act on this legislation until Capitol Hill had decided on the administration's bill for United States aid to general education.

Of all these bills, indications were that progress was assured on only one, that providing some revised arrangement for the selective draft of physicians, dentists and "allied specialists." The special doctor draft act, in effect for almost seven years, is scheduled to expire on July 1. Because Defense Department insists it still needs special authority to draft physicians and other professional health personnel by professional classification, the alternative was

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continuation of a modified doctor draft act or changing the regular draft act.

Meanwhile, a number of other bills had been studied at hearings. They include:

Changes in the medical aspect of civil aviation regulations. Witnesses are widely divided on this measure that would set up an Office of Civil Aviation Medicine within the Civil Aeronautics Administration and give the Air Surgeon General, who would head the office, considerably more authority than now is exercised by U. S. medical officials in this field. There was no official sponsorship of this from the federal governmental level. It was opposed by the Department of Commerce (where CAA is located) and the Civil Aeronautics Board. However, support came from the outside, including testimony from Dr. Jan Tillisch of the Mayo Clinic, Dr. William Ashe, chairman of the Department of Preventive Medicine, Ohio State University, and Dr. Herbert F. Fenwick, president of the Civil Aviation Medical Examiners. Dr. Tillisch headed an A.M.A. ad hoc committee that had started a study of the problem, but he testified as an individual.

Veterans medical care. The House Veterans Affairs Committee had held extensive hearings on a bill to further restrict admission of non-service connected cases to Veterans Administration hospitals, but there were no developments beyond that to encourage sponsors of this legislation.

Civil defense reorganization. Here again a wide split developed at the hearing on just how to reorganize the federal government's participation in civil defense. The Administration wanted to strengthen the Federal Civil Defense Administration, but without going to the extent of making a cabinet-rank Department of Civil Defense, which is the goal of Chairman Chet Holifield (D., Calif.) of the subcommittee that had studied civil defense for more than a year.

Control of barbiturate and amphetamine drugs. The objective of bills before the House Interstate health subcommittee is to extend federal control to take in the manufacture, compounding, processing, distribution, and possession of habit-forming barbiturates and amphetamines. This would be achieved by demonstrating that intrastate control of the drugs is essential to achieve interstate control, a philosophy advanced

for years by some federal officials.

While manufacturers, compounders, processors, and handlers would have to list their names and places of business with HEW and maintain complete records, physicians would not have to comply with these regulations.

* * *

Pressures for economy that had been evident early in the session seemed to lose their effectiveness when Congress really set to work on the budget for the Department of Health, Education, and Welfare. Whereas in first (non-record) votes the House cut scores of items, it simply reversed itself when roll-call votes were demanded in the final go-around.

As an example, no reductions at all were made in funds for the research institutes. \$50 million was restored for grants to help build water pollution treatment plans, \$1.3 million was restored to the Food and Drug Administration. A \$5 million cut in money for general public health grants to states was sustained by the House—but this money will have to be provided later if the House estimate of the extent of the obligation proves too low.

Economy advocates tried without success in the House to cut \$21 million off money for the Hill-Burton hospital construction program.

While in theory the Senate is privileged to make its own cuts in a money bill coming to it from the House, in practice the Senators generally restore much of the money cut by the House and occasionally (as last year) vote large boosts over House figures. So the possibility now is for even higher health and medical budgets before the appropriations bills finally are enacted.

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NORTH CAROLINA

Medical Journal



Vol. 18 No. 6
June, 1957

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President's Address of Acceptance

EDWARD W. SCHOENHEIT, M.D.

ASHEVILLE

As you can well imagine, I approach the presidency of the Medical Society of our great state with mixed emotions. I have a feeling of tremendous pride and pleasure in the great honor that has been bestowed upon me. Although I have been an ardent supporter of organized medicine throughout my professional career, and a regular attendant at our meetings for many years, I have never aspired to hold office; and even in my wildest dreams I would not have anticipated that this honor would come to me.

On the other hand I approach the problem with deep humility and a realization of the great responsibility and the enormous amount of work to be done. I am fully aware of the pattern that has been set by my predecessors and hope that I can do even half as well.

Nevertheless, I intend to face the problems at hand with determination and intensity of purpose, and hope that at the end of my tenure of office I may have played at least a small part in their solution.

Changing Trends

Those of us who were born near the turn of the century have been privileged to see a great many advances. We are truly living in a wonderful age. There has been more progress in the last half century than there was from the birth of Christ to the year 1900. We have seen medicine progress from the horse and buggy stage, with its pill powder and tincture, to a streamlined era of ultraspecialization.

In an address before the Southern Medical Association entitled "Values in Medicine," Dr. R. L. Sanders brought out some points which I should like to reemphasize at this time.

The young physician starting practice in the early years of the century had little formal education and very meagre equipment; however, he compensated for these shortcomings because he knew how to use his five senses and exercised good judgment, courage, and ingenuity. He knew the art of medicine, and was considered to be the friend and counselor of the family. The term "public relations" had not yet come into being.

Fortunately for humanity, scientific knowledge progressed, resulting in improved diagnostic and therapeutic measures, with a reduction in the number of dread diseases and a lengthening of the span of life. Unfortunately, however, during this era of brilliant development the art of medicine slipped almost into oblivion, and the five senses became largely displaced by laboratory methods. As specialization increased, the happy patient-physician relationship began to decline. This, coupled with an overzealousness for financial gain on the part of some and the fact that there are always people who believe they can get something for nothing, helped kindle the flame of socialized medicine.

More recently there has been a return to the old order of thinking—no disparagement of the wonderful advances of scientific medicine, but a realization that a large per cent of illness can be treated by the family physician who has had adequate training and who can work in association with specialists of all kinds. This has brought about a better patient-physician relationship, aided by our public relations conferences. Thus we are beginning to see a return of the art of medicine.

Third Party Interference

This development would be fine except that along with our various advances in

the science and practice of medicine have come certain complexities and impediments which, unless curtailed, may ultimately destroy medicine as we know it today. I refer, of course, to third party interference. You are well aware of the dangers of socialized medicine. In his comprehensive address before our last annual session, Dr. G. Westbrook Murphy told in detail of the dangers of third party interference by government, industry, labor, hospitals and insurance companies, and cited examples in many cases.

The Hoover Commission, in a two-day conference on the means of increasing government efficiency and reducing expenses and taxes, recently reported on the dangers of governmental interference in business and health affairs. I quote Mr. Hoover as reported in the *Journal of the A.M.A.*, February 16, 1957: "The American people must realize that they cannot have every social and public works improvement of their dreams all at once especially in a world where we have to defend ourselves from a monstrous international danger." Senator Byrd of Virginia, chairman of the Senate Finance Committee, urged that the budget of 72 billions be reduced and that the economies of the Hoover report be included in the federal budget. Dr. Basil C. MacLean, president of the Blue Cross Association and a member of the Hoover Medical Task Force, criticized bureaucratic medicine. According to his report, 30 million citizens, or more than one in every six, derive all or part of their medical care from the government or are privileged to do so. Dr. MacLean estimated that if three of the Commission's proposals involving the Veterans Administration were adopted, a saving of many millions of dollars would result.

Although we have been warned about and have freely discussed the problems of third party interference, we have made no move to combat it and until now have never gone on the offensive. Now what are we going to do about it?

This reminds me of a story about a minister who had just established himself in a new community. Since he had the reputation of being a very powerful exhorter, the congregation eagerly awaited the message he would bring on his first Sunday. The minister did not disappoint them, and

preached a rousing sermon fired with enthusiasm and ecclesiastical oratory. The congregation packed the church on the following Sunday to hear him again, but were astonished when he delivered the same sermon, word for word, that he had preached the week before. The members whispered among themselves, but decided to wait and see what happened the next week. When on the third Sunday the minister again preached the identical sermon that he had given on the two previous occasions, the church members decided that it was time to speak. One of the elders asked him point blank if that was the only sermon he knew. "Oh, no," the minister replied. "I know lots of them, but you haven't done anything about this one yet!"

Our Medical Society needs a survey committee similar to the Hoover Commission or task force. Dr. Murphy and our committee on the interference with the private practice of medicine have recommended that a survey of existing conditions be made. It would seem advisable to make this committee permanent, in order to negotiate with the various third party agencies. Furthermore, we have been advised to employ a full-time secretary, a layman, who would be able to be on the spot immediately to instigate negotiations and who would not be retarded by professional duties. Our committee should consist of two or three members of our Society and the lay secretary. Only by means of a negotiating committee will we be able to get prompt action on matters as they arise.

Unless we can combat third party interference through an agency of our State Medical Society, we are headed directly toward the welfare state. Fortunately this is being realized in other parts of our country. Dr. Samuel Freedman, in his presidential address before the New York Medical Society last October, suggested that physicians negotiate with labor unions, insurance companies, and hospitals through their medical society. He said that physicians often come out second best when they try to match wits with these organizations as individuals, and pointed out that the individual physician must realize that for his protection (in bargaining) an organization such as our Medical Society is essential. He further stated that, if in the inevitable struggle around the conference table we are not to be



EDWARD W. SCHOENHEIT, M.D.

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conquered by division in our ranks, we must have a strong, united organization comparable to those with which we must deal; and also that the individual physician is at the mercy of any group which decides to provide medical care through a closed panel system, a clinic, or any organization in which he becomes a hired hand.

In order to prevent compulsory health insurance from being foisted upon us, some voluntary plan seems inevitable. The present Doctors' Plan has caused much controversy, and many rough spots have had to be ironed out. I feel that the plan is now a good one and deserves our support. We have to face the fact that the practice of medicine has undergone a change. Most of us would rather practice as individuals under the old order; however, this is not possible with the pyramiding cost of medical care.

I believe that were it not for Blue Cross and Blue Shield plans, medicine would already be socialized. These plans are the answer to social problems—a cooperative effort to satisfy the public and render satisfactory medical care. Some independence must be sacrificed for the common good, but the physician-patient relationship will be maintained.

Problems Demanding Attention

An active membership

We have a large membership, and many of our members show little or no interest in our Society. Where would they be without organized medicine? I want particularly to urge the younger men to attend the annual sessions and take part in Society activities. I also want to urge the physicians in the state who are not members to join. We need them and they need us. I am in favor of a campaign to interest them in joining.

New headquarters

You have received a brochure describing the prospective building plans for new headquarters for the Society. Our present quarters are entirely inadequate. Many states have built new homes for their societies. We should do likewise; and we should build one that we can be proud of. Our committee on this project has worked hard. I hope we can proceed with their plan.

Highway safety

We constantly hear of heart disease and cancer as causes of death, but only recently has the profession been urged to take part

in the campaign for highway safety. In an editorial on February 5, 1957, the *Asheville Citizen* noted that the American Medical Association has challenged physicians to take an active part in safety campaigns. Highway accidents were called a disease that kills one person every 14 minutes and injures one every 25 seconds. Physicians are urged to support research in safety design of cars, and also to warn their patients about driving after taking drugs with a sedative effect.

One of our greatest dangers is the drinking driver. The Medical Society of the State of New York sponsored a bill making it mandatory that a suspect, when requested to do so by an officer of the law, submit to a chemical test or forfeit his license. This has resulted in almost 100 per cent conviction of drunken drivers in New York State. I want to recommend that our State Legislative Committee on traffic problems be urged to introduce such a bill, and that it be given the support of organized medicine. Our Executive Committee voted favorably on the support of such a bill. The chemical test has been discussed in the Legislature this year, but has not been acted upon.

Several years ago we had a motor vehicle inspection law. It was said to be unsatisfactory and was repealed. I never quite understood why. It is true that most accidents are the result of driver error rather than of structural failure. Nevertheless, we frequently hear of some condition such as faulty brakes causing disaster.

There has also been a movement to increase the speed limit on our highways. It has been shown that in those states where speed limits have been elevated, there has been an immediate rise in the death rate. Furthermore, we need a minimum speed law to prevent crawlers who obstruct our roads and add greater peril to our highway travel.

Conclusion

I wish to thank you for this very great honor and for the confidence you have placed in me. I hope I shall not disappoint you. Many of you will be requested to help us with the problems of the Society. I hope each of you will respond willingly when called upon. We shall endeavor to select our committee members according to their particular interest or talents in any given direction. I shall always welcome your suggestions.

The Responsibility of Medicine Within the Profession And to the Public

WALTER S. PORTEUS, M.D.

FRANKLIN, INDIANA

My first thought concerns the art and philosophy of medicine. This is a sacred trust handed down to us over many decades. According to the Hippocratic oath, we are bound to give of ourselves in the service of mankind. Ours is truly a service profession.

In the art of medicine we are often lacking. The art of medicine is an intangible something which cannot be taught, but is acquired with experience; it is of utmost importance in our daily relations with patients. The art of medicine can be likened to that of painting. Mathematical formulas concerning the proper relation of one color to another may be evolved, but the blending of these colors into a warm, living painting is art. Scientific knowledge does not provide the final answer in relation to our patients. Knowledge acquired by memory must be tempered with knowledge of human psychology and its practical application to living, thinking individuals. Since every individual is cut from an original pattern which has no counterpart, I beg you to regard each person as one whose individuality requires your special attention and consideration. Because it cannot do this, government medicine, union medicine, or any other collective system of medicine will work only for the production of a lower quality of medical care.

The Struggle Against Governmental Control

I like to think of my profession as being composed of individuals who are rugged to the nth degree. To practice medicine, however, we need two faces: one a face of rugged individualism to present to our patients, and another to present to the world in dealing with the socio-economic aspects of medicine. In regard to the latter we must stand united to ward off the threats of government or union medicine, or any other type of control which limits the exercise of our best judgment in the care of the sick.

While Wagner, Murray, and Dingell made a frontal attack that failed, the advocates of social reform have made a flanking attack which has gained more ground than the original trio had ever hoped to accomplish. Like Russia, they are progressing to the point of complete control without fighting a major battle.

This is indeed good strategy. Whether we like it or not, it is succeeding from their point of view. Most of us dropped our defense when the frontal attack failed. Legislation such as Medicare is but one illustration of the inroads which have been made against the private practice of medicine. While each state bargained with the federal government for a fee schedule, we lost sight of the fact that before long it will be hard to defend a fee differential between states or even within states. The natural question the public will ask is: "Why should the cost of an appendectomy be one amount in Indiana and another in North Carolina?"

Indiana is trying a different approach—an estimated average fee schedule which lets physicians charge their usual fees with the hope that total fees will not exceed the estimated state average. As you all know, fees vary within a state, and we did not want to disrupt the normal schedule in any one area. We were drawn into a medico-economic struggle which was being fought on a patriotic and emotional level. It was difficult to fight on that basis. The pattern having been set, the next step will be a medicare program for all federal employees, unless we exert imagination, foresight, and leadership. This group will become wards of the government, as have the dependents of active military personnel. This is but another step toward total governmental control. I am afraid that most of us do not realize the importance placed upon health in our total economic picture.

Lenin said: "Medicine is the keystone of the socialistic arch." Recent events bear out his words. The passage of total disability laws for patients 50 years of age or

older has set the pattern for the extension of such benefits to all individuals. With the federal government caring for the dependents of military personnel, the aged, the blind, the crippled, and disabled, and with the contemplated coverage of federal employees, it will not be long until there will be no one left to care for on a private basis. The majority of people will be covered under the aegis of federal paternalism. Then we all will be working, not as rugged individuals of medicine, but as employees of a strong federal government. A good bit of our present predicament stems from our own lack of interest in the socio-economic aspects of medicine and from a feeling of complacency. The brochure entitled "The Trojan Horse," by Dr. Louis M. Orr, chairman of the A.M.A. Committee on Federal Medical Services, provides timely reading for those who are interested in the future of private medical practice in this nation.

Medical Fees

Another subject which is pertinent to our discussion is that of fees. I have never advocated a statewide fee schedule, because of the variation in services both in quality and quantity. A schedule other than one dictated by competition violates our type of economy and, in reality, is contrary to the principles of the Anti-trust Act, the exception to this being that federal laws seem to give labor the right to set production schedules and bargain for industry-wide wage scales over and beyond the limitations imposed on industry.

Having served on a state grievance committee, I know that the question of fees plays a large part in the misunderstanding between physicians and patients. No patient wants to be sick. Charges for medical services represent an expense that the patient did not want to incur. In many cases, therefore, he objects to medical charges as something that has been forced upon him—not something that he desired. When he recovers, it is easy for him to forget the frantic call in the night and the famous expression, "Hell, Doc! Don't spare the horses; do whatever you think necessary."

Expenditures for more tangible objects such as cars and television sets are more easily rationalized in the average mind. Because of this peculiar human attribute, it behooves us to consider favorably the

prior discussion of fees, not when life is at stake, but in many situations involving elective procedures. This can be an effective means of improving doctor-patient relationships. The statement made by many physicians that it won't cost much leaves much to be desired. How much is much? Remember, the patient lacks the knowledge and technical skill to evaluate medical services. I therefore urge doctors to discuss their fees in detail before performing a service, whenever possible.

Prior discussion of fees will alleviate many problems and will permit physicians to evaluate their own services. At such times I have found my patients to be more receptive to a discussion of fees and more likely to be satisfied.

In a pamphlet entitled "To All My Patients," I tried to describe the mechanism of costs, procedures involved and the team participating, and the individual relationship of each member to the patient. The response snowballed, and I filled requests from every state in the Union. This type of pamphlet was promoted by the A.M.A., and millions of copies were distributed to physicians all over the country. Failure to discuss fees before performing a service seems to stem from an archaic fear of being considered mercenary. Nothing, I am sure, could be further from the truth. What I have said cannot be construed as haggling over the cost of emergency services.

Published fee schedules and point systems, as advocated in some communities, have their place, but I do not believe they abrogate the necessity of explaining fees in advance. Rather than leveling our skills, the latter keeps in operation the competitive principle of free enterprise.

Prepaid Insurance

Prepaid insurance, be it Blue Shield or commercial coverage, has been our bulwark against compulsory government insurance. Blue Shield, whether a service or an indemnity type of insurance, deserves our continued support. Only a little over a decade ago, when Indiana physicians started to delve into the intricacies of prepaid insurance for our patients, commercial companies looked askance upon the venture. Now, however, the competition is much keener, to the betterment of the contracts. We must find a way to broaden coverage and vary contracts for long-term illnesses.

At the same time we must not forget the segment of our population that prepaid insurance was originally devised to help—the lower income worker with a large family.

A survey by the Health Information Foundation shows that about 80 per cent of families with annual incomes of more than \$5,000 had some form of health insurance, while 70 per cent of the \$5,000 to \$5,999 income group were covered, and only 40 per cent of the families earning \$3,000 or less were insured. The average annual income of the insured families was \$4,500, while that of the uninsured was \$2,700.

More emphasis must be placed on these lower income groups lest the government assume responsibility for this large segment of our population. Ways and means of enrolling the unemployed and rural families must be evolved. Commercial companies, by their very nature, must produce profits for their stockholders. They take only the cream of the crop, and, because of this selectivity, can compete to a better advantage. But by the same token they do not provide coverage for the neediest segment of our population.

Blue Shield, often referred to as "The Doctors' Plan," really was not designed for doctors. Its purpose was to enable patients to budget their medical expenses. You gentlemen must become better versed in the functions of your own Blue Shield Plan. Keep it alive by jealously guarding those principles, for if Blue Shield fails, the destiny of private medical practice will be jeopardized. And I predict that if private medical practice fails, so will our system of free enterprise. Again, in keeping with the subject assigned to me, I cannot help but touch upon our responsibilities as physicians to our communities.

We are first citizens and second doctors. As such we must take an active interest in the political affairs of our community, state, and nation. Remember, we wield a force without parallel, if we do not let complacency rob us of that power. We criticize, rightfully or wrongly, the usurpation of authority in medicine by the various lay health movements. With emotional appeal and bulging coffers, they bid well to supplant our efforts in providing medical care unless we provide active leadership.

Physician participation at all levels is

a must; otherwise we have no right to complain of the activities of these groups. I am convinced that the present polio immunization program would have been much more effective had it been merged into our private practice instead of being presented as a Hollywood extravaganza.

We must be aware of the needs of our growing and aging population. We must find ways to care for the chronically ill and geriatric patients. In my local hospital 35 per cent of our beds are occupied by patients over 60 years of age, many of whom are in need of nursing care only. This is truly an economic waste. Changes in home life, housing, and employment have created new patterns in the care of our increasing aging population. It behooves us as physicians to be aware of the problem and alert and active in its solution.

Your voice in matters pertaining to your philosophy of medicine in relation to the delivery of your service to the public is of no minor consequence. Here again, apathy, lethargy, and unwillingness to keep abreast of socio-economic trends will be our undoing.

Remember, ours is a life of service and is in keeping with the Hippocratic Oath. Our time is not really our own. Please do not misunderstand me. We still want to live as normal a life as possible, yet ever remembering the Oath.

Devote some of your spare time to the problems of organized medicine. In Indiana, with nearly 5,000 physicians, about 10 per cent are active in work pertaining to the economic aspects of medicine. If any objectionable legislation or adverse situations arise, you can always hear the cries of the remainder: "Why didn't we doctors do something?" Or, "No one told me about this."

If we are to develop and maintain a proper relationship with each other and with the public, we must work together as a team. We must solve the problem of aging. We must make our services available to all, regardless of their economic status. We must participate with our neighbors in the affairs of our communities. We must maintain, at all levels, active interest in medical organizations if we are to respect each other and maintain the respect of those who, over the years, have come to look upon us as their friends and

counselors. Only thus can we avert the eventual fulfillment of the prediction made by the philosopher Plato in 327 B.C.:

All forms of government destroy themselves by carrying their basic principles to excess. The first form is monarchy whose principle is unity of rule. Carried to excess, the rule is too unified. A monarch takes too much power. The aristocracy rebels and establishes an aristocracy whose main principle is that selected

families rule. Carried to excess somewhat larger numbers of able men are left out, the middle classes join them in rebellion, and they establish a democracy whose principle is liberty. That principle, too, is carried to excess in the course of time. The democracies become too free, in politics and economics, in morals, even in literature and art, until at last even the puppy dogs in our homes rise on their hind legs and demand their rights. Disorder grows to such a point that a society will abandon all its liberty to anyone who can restore order.

Tendon Healing - A Review

R. W. POSTLETHWAIT, M.D.

DURHAM

A tendon is an elongated fibrous structure through which the force developed by a muscle is transmitted to a fixed point. Since the tendon moves as a unit, the surrounding tissue must permit movement within the necessary range. The characteristics of a tendon, therefore, are high tensile strength and free gliding motion. The object of the repair of a tendon is to restore the tensile strength and mobility. An understanding of the process of healing of tendons is a prerequisite to the care of tendon injuries.

According to Bunnell⁽¹⁾, the gliding of a tendon differs, depending on whether a tendon pulls straight or around a corner. Tendons with a straight pull travel through paratenon; those which go around a corner, through a tendon sheath. Paratenon is a specialized loose fat between the tendon and its fascial compartment. The long elastic fibers of this fat run between the tendon and fascia, and are coiled like a spring with the tendon at rest. As the tendon moves, the fibers straighten out enough to allow free excursion. Thus the tendon does not glide through paratenon, but drags the loose elastic tissue first in one direction and then the other.

With sheath formation, the tendon glides around a curve on a thin film of synovial fluid between two smooth, synovial lined surfaces. The sheath consists of two layers of synovia, the visceral enveloping the tendon, and the parietal lining the fascial tun-

nel. The two layers are continuous with each other through a narrow mesotenon, which is so loose and filmy that it does not hamper motion of the tendon. The mesotenon, containing most of the blood vessels, is always located on the longitudinally convex side of the tendon, away from friction. The concave, or friction-bearing, side is relatively avascular and is harder, in order to stand wear. The inner, or visceral, layer is called the epitenon, and the small septa running into the tendon from the epitenon form the endotenon. The mesotenon, which bears the blood and lymph vessels, is reduced to the ligamenta brevis and longus within the fingers. Where tendons pull around the concave side of a limb, as in the fingers and wrist, they are held in their beds by annular ligaments or pulleys that keep the tendons from bow-stringing across the joints and so losing their mechanical efficiency. These ligaments are near but not at the joints.

Experimental Work with Animals

Mason and Shearon⁽²⁾ studied tendon healing in detail. A review of this work follows. In a group of dogs, the tendon corresponding to the extensor carpi radialis in man was cut out and sutured. In another group the same tendon was used, a section being removed and replaced by a length of tendon from the same dog. In some of the extremities were immobilized with plaster for various intervals; others were allowed full use of the leg. At autopsy the area of suture or graft was exposed, the gross description recorded, and the segment removed for histologic study. Observations

From the Department of Surgery, Duke University School of Medicine and the Veterans Administration Hospital, Durham.

Read before the North Carolina Surgical Association, Hot Springs, Virginia, March 23, 1957.

extended from 4 to 100 days; the majority were made within the first five weeks.

Considerable variation was noted, but the findings can be summarized as follows. During the first few days after suture swelling and edema were present in the peritendinous tissues. The tendon stumps were swollen, had lost their natural sheen, and were pink or red. The stumps were usually separated, the defect being filled by a red gelatinous exudate which looked like granulation tissue and had no tensile strength. The sheath was also thickened and edematous. Microscopically, the separated stumps ended fairly abruptly against an early granulation tissue in the defect. The tendon nuclei were swollen, fat, more round or oval than normal, and also slightly more numerous. Intratendinous vessels were wider than normal, with an increase in perivascular cells. The fibrous septa of the tendon were thicker and at the ends sent cellular strands into the granulation tissue. The distal stump showed the same changes, although less advanced. The sheath tissues were thickened and cellular, and had fallen into the gap over the end of the tendon to take part in the formation of the intervening tissues. The defect between the tendon ends was filled with early granulation tissue containing red cells, fibrin, fibroblasts, leukocytes, and early capillaries.

At the end of the first week fairly definite structural continuity had been established by the sheath and peritendinous tissues, with the stumps fused into the organizing exudate. The sheaths had also fused with the stumps, so that pull on the muscle moved the whole mass of tissue. Microscopic examination showed a union of the stumps by proliferation of tissue from the sheath and peritendinous tissues. Both stumps were bulbous and thicker than normal, partly because of actual proliferative changes in the tendon itself. Tendon nuclei were greatly multiplied, and tendon cell mitoses were seen. The tips of the stumps were beginning to send out tiny strands of fibers and nuclei into the intervening tissues. The tendon was extremely vascular, and the fibrous septa were thicker than normal. The sheath and peritendinous tissue about either stump were thick and dipped down into the gap, fusing in the center to form a solid band of tissue. A triangular space was formed by the end of

the tendon and the sheath, and this space, at first filled with granulation tissue, was being invaded by fibers from the proliferating tendon. The union at the end of the first week was therefore a sheath union, but tendon proliferation was beginning.

At the end of the second week the inflammatory reaction was decreasing; the adhesions were easily broken up by blunt dissection. The tendon stumps were even more bulbous and still fused to the intervening sheath tissues. Microscopic examination showed further advancement of healing, with increased tendon nuclei throughout the stump and longer strands of tendon fibers passing into gap tissues. Mitoses were plentiful. The sheath tissues were still adherent to the stumps and bridged between them.

After the third week union was substantially that due to the tendon itself. Few adhesions were found between the superficial fascia and the tendon, most of the swelling had subsided, and the tissues were regaining their normal appearance. At the suture line was a thin sheet of tissue which was easily removed from the tendon and beneath which the tendon moved easily. The defect was bridged by a rounded strand of tough fibrous tissue, smaller than normal tendon, but quite strong. Microscopically, the bulbous stumps still contained many nuclei, and mitoses were frequent. The tissue apparently growing out from the tendon now extended from stump to stump, was oriented in the line of pull, and suggested a bundle formation as in adult tendons. No definite new synovial layer was ever formed.

The process of repair after the introduction of a tendon graft was essentially the same, although somewhat more prolonged. During the first phase, lasting about two weeks, union was effected mainly by the sheaths and peritendinous tissues. A second phase, overlapping the first, consisted of tenoblastic proliferation. From the second week on, the new tendon was formed from the organization of the scar between the ends of the tendon and the graft, a process in which the tenoblasts play the most important part.

Thus it can be seen that after tendon suture, the sheath and surrounding connective tissue and the tendon itself play an equally important part in the healing process. Where tendons lie in dense osseofib-

rous tunnels, such as the flexor tendons of the fingers, the sheath is thin, connective tissue sparse, and the blood supply less, making healing more difficult.

The Tensile Strength of Sutured Tendons

In another series of experiments, Mason and Allen⁽³⁾ studied the tensile strength of sutured tendons, employing the equivalent of the flexor carpi ulnaris. In the first group of dogs the leg which had been operated on was immobilized in plaster throughout the period of healing. After two days tensile strength was lower than the tensile strength of the suture, indicating that some softening of the tendon was occurring. On the third and fifth day the tensile strength was still very low, and the sutures pulled through the tendon stumps. On the seventh day the tensile strength had started to rise, and by the tenth day had increased further, with firm adherence of the sheath and peritendinous tissues as a cuff. About the fourteenth day the strength of the attached cuff of sheath reached a maximum, and between the fourteenth and nineteenth days, a plateau was reached. Another rise in tensile strength carried to the twenty-eighth day, with a decrease on the thirty-fifth day.

In the second group, the plaster was removed after three weeks and unrestricted use of the leg was allowed. Tensile strength increased so rapidly after mobilization that on the forty-second day it was greater than that of the musculotendinous junction. In this group of animals, the surrounding tissues also became more areolar and allowed a certain amount of motion in the underlying tendon. The tendon ends were larger and more bulbous than in the immobilized tendons, and separation was greater. Therefore the rapid upswing in tensile strength after removal of the plaster was obtained at the expense of greater reaction in and about the tendon as well as a greater separation of the stumps.

The tensile strength curve for sutured tendons therefore appeared to be similar to healing in other tissues, although a response to functional demand seemed evident. Since this response was accompanied by certain disadvantages, care must be taken in deciding how and when to use this stimulus. Other groups of animals were allowed restricted use of the extremity after a week of rigid immobilization. In all groups

the amount of peritendinous adhesions and reaction appeared directly related to use. In those tendons which were completely immobilized, very little reaction was noted, but the tensile strength was decreased, although the result of activity after five weeks' immobilization was not determined. With restricted motion, some thickening occurred, although these animals were followed only three weeks. Unrestricted use after three weeks' immobilization led to a bulbous proliferation at the line of union and fibrous adhesions between the stumps, the sheath, and surrounding tissues.

The changes in tensile strength can be correlated with the histologic process of repair: the first phase of decreased strength corresponds to the phase of exudation and fibrin union; the period of increased strength, reaching a plateau about the sixteenth day, corresponds to the phase of fibroplasia; the second rise in strength, starting about the twentieth day and continuing for an undetermined period, corresponds to the phase of maturation.

The paratenon or sheath should therefore be preserved in tendon suture, as these tissues play an important role in the early healing, whereas the tenoblastic proliferation is the more important factor later. Accurate approximation of the tendon ends will promote the latter type of growth. Immobilization will be necessary during the period when tensile strength is low—that is, a period of about three weeks—following which restricted and then full motion will stimulate a rapid gain in tensile strength. Infection, marked suture reaction, inaccurate approximation, and early use will cause increased reaction, followed by decreased motion and impaired function.

According to Goldner⁽⁴⁾, the greatest number of failures in the tendon suture occurs in lacerations of tendons between the flexion crease of the palm and the distal crease of the finger, as in this location the flexor tendons are confined in a narrow space, crossing three annular ligaments. The blood supply is scanty and primary suture nearly always results in a bulbous enlargement, with adherence of the two tendons and of the tendons to the sheath. The tendon moves poorly and the bulbous enlargement cannot glide under the annular ligament. The result, of course, is fixation and poor or absent function. Lacerations

of tendons in this location will usually require a graft. Goldner had described in detail the anatomic and technical details to be considered in the selection of the proper procedure for lacerations of the finger flexor tendons⁽⁴⁾.

Summary

Healing of a severed tendon takes place early from the peritendinous tissues and later by tenoblastic proliferation. A three-week period of immobilization will be followed by a rapid gain in the tensile strength of the tendon when limited motion is allowed. Early or vigorous motion will result in excessive reaction at the site of healing.

with ultimately poor function. Flexor tendon injuries in the fingers require special surgical care because of the anatomy in this area.

Summary

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The Proper Use of Posterior Pituitary Extract in Pregnancy

Part II

JAMES F. DONNELLY, M.D.

WINSTON-SALEM

Most obstetric books list a rigid set of conditions which must be fulfilled prior to the administration of Pitocin and contraindications to its use. These restrictions are based on the use of Pitocin for inertia and elective induction. When Pitocin is used for many of the indications listed in Part I, these restrictions must be modified. Furthermore, many situations that formerly were considered contraindications are no longer so considered.

Prerequisites for the Use of Pitocin

1. Consultation

Consultation with another physician should be mandatory. The consultant should record his findings and opinion on the patient's hospital record. All inductions should be reviewed at staff conferences. Willingness to seek consultation is a trait of a conscientious physician, not an inferior one.

2. Term pregnancy

Unless indicated by some obstetric complication such as toxemia, Pitocin induction should not be carried out unless the patient is at term. Estimation of term based on the date of the last menstrual period is

notoriously unreliable. Engagement of the presenting part, effacement of the cervix, and partial cervical dilatation indicate an impending labor.

3. Past obstetric history

A past history of difficult labor suggesting dystocia should be seriously considered. A normal obstetric history is desirable, particularly for elective inductions.

4. Multiparity

Most obstetricians feel that the patient should have had at least one normal vaginal delivery, and preferably, not more than 4 to 6 vaginal deliveries before induction is considered. One vaginal delivery may be a better index to pelvic capacity than any pelvic measurements. This certainly is not a prerequisite to the use of Pitocin.

5. Adequate internal pelvic measurements

External measurements are of no value in estimating the pelvic capacity. X-ray pelvimetry is of valuable assistance in interpreting the case which presents difficulty. Adequate internal pelvic measurements are essential for all obstetric patients, particularly those who are to receive Pitocin. A combination of internal pelvic measurements and x-ray pelvimetry is advisable prior to induction with Pitocin.

From the Committee on Maternal Welfare of the Medical Society of the State of North Carolina.

6. *Position of the fetus*

The presentation and position of the fetus should be determined accurately. Elective induction should be restricted to single births in which the infant is in a well flexed vertex position. The fetal heart should be normal. If any irregularities of the fetal heart develop during induction, Pitocin should be discontinued. When in doubt concerning the position of the fetus, a flat plate of the abdomen will be of considerable help.

7. *Adequate personnel*

Adequate personnel must be available to supervise the induction. Nursing personnel supervising the induction must be free of all other obligations. The physician should be immediately available; in other words, he should be in the hospital. In certain complications such as toxemia and bleeding, he should be in constant attendance. The physician who performs an induction should be fully qualified to handle any complication which might arise as a consequence, including cesarean hysterectomy.

8. *Adequate facilities*

Facilities should include an unoccupied operating room, a blood bank, and an available anesthetist. A can of ether and a mask should be at the bedside in the event that uterine tetany occurs.

9. *Record of induction*

A simple but descriptive record of the induction should be kept at the bedside. This should consist of a running record of the temperature, pulse, and blood pressure, the rate of flow of the intravenous drip, and the frequency, character and duration of contractions. The fetal heart rate should be recorded at 15 to 30 minute intervals.

Contraindications

1. *The absence of any of the foregoing prerequisites.*

2. *Labor*

Pitocin is contraindicated in the presence of normal labor when its only purpose is to speed the delivery for the convenience of the obstetrician or the patient.

3. *Age and parity*

Patients over 35 years of age who have had six children are considered by many as poor risks for Pitocin induction. These age and parity limitations represent good general guides, but do not absolutely contraindicate induction with Pitocin.

4. *Malpresentation*

Malpresentation, as represented by brow or transverse lie, compound presentations, or face with posterior chin, indicate cephalopelvic disproportion and as such definitely contraindicate the use of Pitocin. Posterior occiput positions may indicate a funnel-shaped pelvis, in which case Pitocin is contraindicated. If there is no evidence of disproportion in association with the posterior occiput position, the drug is not contraindicated. The use of Pitocin in the presence of a breech is inadvisable because of the greater difficulty in evaluating disproportion and the increased number of complications associated with breech presentations.

5. *Overdistension of the uterus*

Overdistension of the uterus from multiple pregnancies or polyhydramnios is generally considered to be a contraindication.

6. *Fetal distress*

Any evidence of fetal heart abnormalities prior to or during induction contraindicates the use or continued use of Pitocin.

7. *Hypertonic uterus*

A hypertonic uterus or the presence of the hypertonic type of uterine inertia contraindicates Pitocin. Uterine tetany is common, and the response to Pitocin is extremely poor.

Technique of Pitocin Induction

1. *Preparation*

The indication for the induction should be clearly recorded in the record, along with the consultant's opinion. Conditions which must be fulfilled before induction is performed should be checked.

2. *Drugs*

Pitocin is the drug of choice, and should be administered by intravenous drip. This technique assures a constant dose level and permits titration to a very fine degree. The dosage varies considerably from one patient to the next and also in the same patient from one day to the next.

3. *Method of administration*

The following method of administration is suggested, particularly when it is necessary to leave the patient unattended at times.

An intravenous set is prepared by connecting two bottles to the needle by means of a Y tube (fig. 1). Both bottles contain 500 cc. of 5 per cent glucose. Bottle A is labeled "Pitocin," and the amount of Pito-

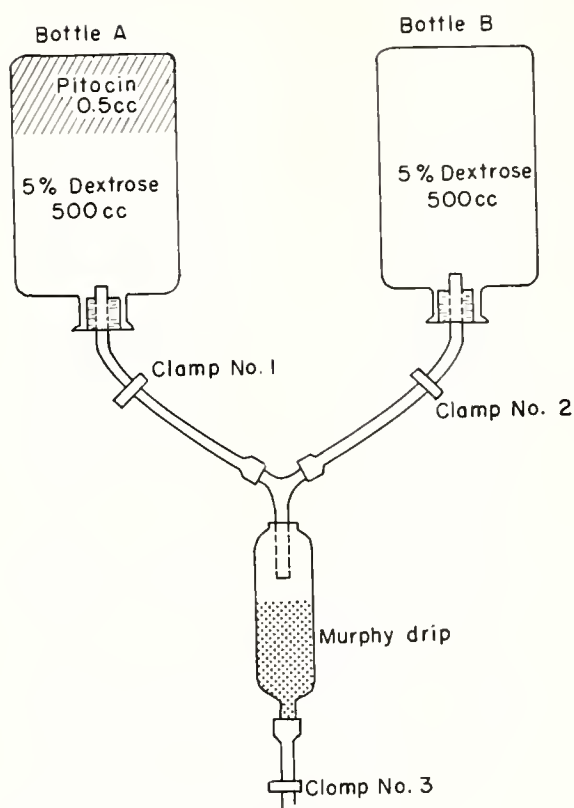


Figure 1

cin introduced into the bottle is recorded on an adhesive strip. The average dose is 0.5 cc. of Pitocin to 500 cc. of glucose. The bottle must be shaken after the Pitocin is introduced. A tunnel clamp is then placed on the tubing leading from each bottle, and a third clamp is placed below the Y tube. The tubing is then filled with the Pitocin solution from bottle A, and this bottle is clamped off. The tubing is completely filled from the second bottle, and the intravenous set is then ready for use. Intravenous drip is begun and the rate established with the flow from bottle B, containing glucose alone. Once the infusion has reached a steady rate of 8 to 12 drops a minute, bottle B is closed and Pitocin-glucose solution is started. The rate of drip is then titrated, increasing by 5-drop increments every 15 minutes until clinically normal labor contractions are obtained. The

rate of flow must be kept at the lowest level which will produce clinically normal labor.

4. Observations

The blood pressure, pulse, the frequency, duration, and character of uterine contractions, the rate of flow, and the fetal heart rate should be recorded at 15 minute intervals on a separate sheet of the patient's chart marked "Pitocin Induction." The sheet should be kept at the patient's bedside at all times.

5. Management of intravenous drip

If the attendant finds it necessary to leave the patient, the Pitocin-glucose solution in bottle A may be turned off and the intravenous drip maintained by releasing the clamp to bottle B. Any alterations in the rate of flow, untoward reactions, or complications can be handled easily by closing off the Pitocin-glucose solution, but continuing the glucose drip. The attending physician should be notified.

6. Dosage

No dosage can be stated since the correct dose depends on the response of the patient. Once normal labor is well established, Pitocin should be discontinued. If the contractions subside, the drug can be resumed.

Conclusion

Pitocin serves many indicated and useful functions in the management of obstetric problems. It has replaced many more dangerous obstetric procedures. It is not without inherent and unpredictable dangers, even in the hands of the so-called "expert." The safe use of Pitocin requires a knowledge of certain fundamentals about uterine motility, the pharmacology of the drug, and clinical obstetrics. The Committee on Maternal Welfare feels that the limitations and proper usage of Pitocin should be made known to all physicians.

The objective of this article is to present the most generally accepted viewpoints concerning the use of Pitocin, with the hope that each local medical society or hospital staff will assess its own problems and establish the necessary controls over a potentially dangerous drug.

Rupture of the Spleen

A Review of Sixteen Cases

CHARLES A. SPEAS PHILLIPS, M.D.*

PINEHURST

This paper is a review of 16 cases of rupture of the spleen. Three have been the author's cases, and thirteen are cases reviewed while the author was at Veterans Administration Hospital, Hines, Illinois.

Etiologic Factors

Age

The age of the patients in this series varied from 19 to 55. Rupture of the spleen is reported most often in individuals between the ages of 15 and 40. Children either are subjected to less severe trauma, or, more likely, they withstand trauma better since the spleen is more firm in children.

Trauma

Thirteen of the 16 cases in this series were the result of trauma. In 9, the trauma was severe enough to produce *associated injuries* other than contusions. Only one case involved an open injury—a bullet wound—which was thought to have been limited to the chest until signs of abdominal hemorrhage developed in the patient 18 days after his injury.

Seven of 13 cases of traumatic ruptures in this series had latent periods of 4 days, 11 hours, 5 days, 7 days, 18 days, 34 days, and 2 years, respectively, between the original trauma and the occurrence of clinically obvious hemorrhage.

Harkins and Zabinski⁽¹⁾ found in their collected review of cases with delayed hemorrhage that 55 of 63 patients (87 per cent) had hemorrhage after a latent period of 16 days or less. McIndoe⁽²⁾ previously had reported 1 case and collected 45 similar cases of delayed hemorrhage in which 40 of 46 (87 per cent) occurred after 16 days or less, and the majority within the first few days. In one other case in the literature, the latent period was two years.

Delayed hemorrhage may be the result of either further hemorrhage at the site of original rupture, or rupture of the splenic capsule and further hemorrhage at the site of a subcapsular hematoma or a pericapsular hematoma.

Spontaneous rupture

Spontaneous rupture of the spleen occurred in 3 cases. One occurred in a leukemic patient with splenomegaly, another in a patient with hepatitis, and a third in a patient with splenomegaly due to malaria. In the first case, the rupture was preceded by infarction. In the second, there was no obvious explanation except that in hepatitis the spleen is often soft and may be enlarged. A few cases of spontaneous rupture in the normal spleen have been reported, but the majority have occurred when the spleen was diseased. Hershey and Lubitz⁽³⁾ have collected 65 cases of spontaneous rupture of malarial spleens.

Clinical Features

The symptoms and signs of rupture of the spleen can be divided into two groups: (1) those due to blood loss, and (2) those due to blood in the peritoneal cavity.

Symptoms

The most common symptoms due to hemorrhage are *weakness*, *dizziness*, and *fainting*. One or more of these symptoms were present in 14 cases. With extensive blood loss, restlessness, pallor, sweating, and air hunger may be present.

Abdominal pain, due to blood in the peritoneal cavity, was present in 15 of the 16 cases, and was *localized to the left upper quadrant* in 13. *Pain in the back* over the spleen and *pain referred to the left shoulder* was present in 8 cases. The pain was usually constant, dull, aching, increasing in severity, and worse on coughing. Seven patients complained of *difficult breathing* because of the pain associated with movement of the chest and diaphragm. *Nausea* and/or *vomiting* was present in one-half the cases.

Signs

An *increased pulse rate* was present in 11 cases, whereas a drop in blood pressure was present in only 6. *Elevated temperature* was present in 11 cases, and increased respiratory rate in 8.

Of the abdominal signs, *tenderness* and *rigidity* were present in nearly all cases. Re-

*Diplomate American Board of Surgery.

bound or referred pain to the left upper quadrant on palpation of the abdomen was present in 7. *Flank dullness* was mentioned in only 3 cases. *Ballance's sign*—shifting dullness in the right flank and fixed dullness in the left—was not mentioned in any case. *Bowel sounds were diminished or absent* in half the cases.

Laboratory findings: *Anemia* was present in 13 cases; however, in only 2 was it marked. *Leucocytosis* was present in 14 of the 16 cases, but was not marked in any case except the patient with leukemia.

Roentgen findings: Findings in this series of cases have been carefully reviewed. In most instances a postero-anterior view of the chest, as well as an upright film of the abdomen and diaphragm, and postero-anterior and antero-posterior views of the abdomen with the patient lying down have been obtained. The following findings are helpful in the diagnosis.

1. *Lack of definition of the splenic edge, which may be associated with a large diffuse density in the splenic area.* Of all the cases in this series in which abdominal films were taken, the splenic edge was poorly defined or not seen. Free blood and the spleen are equally opaque to x-rays. The presence of free blood around the edge of the spleen, obliterates the splenic shadow. In about 75 per cent of routine films of the abdomen, the edge of the spleen can be seen. When the stomach is distended with air, the spleen can be seen with greatest clarity. Presence of a density in the splenic area, to be of significance, should be associated with loss of the splenic edge or one of the other x-ray findings discussed.

2. *Elevation of the diaphragm.* This was the second most common finding in this series. If the chest is normal, elevation of the diaphragm suggests the presence of abnormality in the left upper quadrant of the abdomen. Normally the left side of the diaphragm is lower than the right; hence an upright film with the patient perfectly erect should be obtained to compare the two sides.

3. *Deformity or displacement of the stomach shadow.* If the splenic mass is appreciably enlarged, deformity or displacement of the air bubble in the stomach to the right may be clearly demonstrated when the patient is in the upright position. If there is insufficient air in the stomach for visualiza-

tion, gas may be introduced—either air through a Levin tube or carbon dioxide given in a carbonated drink or citrocarbonate. One patient was given Coca Cola, and the contrast obtained clearly showed the stomach bubble compressed on the lateral side and displaced slightly to the right.

4. *Deformity or displacement of the air in the splenic flexure of the colon.* Because of varying amounts of air, the splenic flexure of the colon is not visualized on all films of the abdomen. When the splenic flexure is well visualized, a deformity or displacement may contribute to the diagnosis.

5. *Serration of the greater curvature of the stomach distended with air.* Solis-Choen and Levine⁽⁴⁾ have described this finding, which may be present when the stomach is distended with air. They attributed its presence to the tendency of the blood to gravitate along the gastrosplenic ligament and infiltrate in juxtaposition to the gastric wall. In 2 cases the stomach was distended with air, and 1 of these showed the serrations along the greater curvature of the stomach.

Diagnosis

Of the 13 cases with a history of trauma, the preoperative diagnosis of ruptured spleen was made in 11 cases and suspected in 1 additional case. Intra-abdominal injury was the preoperative diagnosis in the remaining case.

A history of trauma followed by dizziness, weakness, fainting, abdominal pain most severe in the left upper quadrant and occasionally radiating to the left shoulder, abdominal tenderness and rigidity, absent or diminished bowel sounds, increased pulse rate, shock, anemia, and the absence of intrathoracic disease or injury should lead the surgeon to the diagnosis of splenic rupture.

Differential diagnosis

The following discussion elaborates the important clinical features in the differential diagnosis of conditions most commonly confused with rupture of the spleen.

Injury to the thorax: Symptoms simulating abdominal injury may be produced by thoracic injuries such as fractures of the ribs, pneumothorax, or hemopneumothorax. It is always a good rule in any acute condition of the abdomen to attempt to eliminate the chest as a possible source of trouble. A careful history, physical examination,

and roentgen examination of the chest should certainly be obtained. Frequently an intercostal block may be of value. Abdominal visceral pain is unaffected by intercostal block, whereas pleural pain may be relieved.

Rupture of the intestine or stomach and perforation of a peptic ulcer: Rupture of the intestine or stomach is most often caused by a sharply administered blow to the relaxed abdomen. Perforation of an ulcer is usually spontaneous, and is preceded by a history of ulcer in about 75 per cent of the cases. Symptoms usually develop immediately. If the opening is small, there may be temporary walling off of the ruptured area with a lull in symptoms. When food is taken, peristalsis is stimulated, the lesion is reopened, and peritonitis develops more or less rapidly, according to the size of the opening. Signs of shock may be apparent early and become increasingly severe because of the peritonitis. The initial shock of trauma alone, without visceral injury, will usually have subsided within two to three hours.

Most commonly in rupture of the intestine there is evidence of a rapidly spreading peritonitis. Pain is marked. Frequently there is nausea and vomiting. The pulse is elevated. There may be distention. The abdomen is quite rigid and tender, notably near the site of rupture. Liver dullness may be absent if sufficient air has escaped. Bowel sounds are diminished or absent. Rectal tenderness may be present if the peritonitis has spread to the pelvis.

An upright film of the abdomen may show free air under the diaphragm. Frequently air in the small bowel, due to an ileus, may be seen near the site of rupture.

Gastrointestinal bleeding: Frequently when signs of shock from bleeding are manifest and abdominal findings due to free blood are minimal or absent, the surgeon must consider bleeding within the intestinal tract. Significant features that may be elicited in the history are: the absence of trauma, a previous diagnosis or symptoms of a peptic ulcer, and/or cirrhosis of the liver. Tarry stools or vomitus containing blood are highly significant. A rectal examination, with study of the stool for blood, should always be made. The absence of shoulder pain is unreliable, since it occurs in only about one fourth of the cases of

splenic rupture. A barium study revealing esophageal varices or peptic ulcer may establish the diagnosis.

Laceration of the liver: The signs and symptoms in this condition vary widely, depending on the degree of trauma to the liver. The primary findings are those of peritonitis, and they are not apt to be localized on the left as in rupture of the spleen. Shoulder pain, if present, usually will be on the right. Some authors consider a slow pulse, in the presence of other evidences of peritonitis, significant in lacerations of the liver. This is not necessarily true, particularly when there is extensive hemorrhage.

Injury to the pancreas: Injury to the pancreas is rare, and symptoms are in no way distinctive. Shock may be great if there is pancreatitis. Pseudocyst formation is a late sequela of pancreatic trauma.

Injury to the kidney: Pain, largely in the back and flank, is prominent. There are few abdominal findings. Tenderness and muscle rigidity are noted in the flank. Shock may be present, depending on the degree of hemorrhage and/or extravasation of urine. The urine usually contains gross blood or many red cells. Roentgenograms of the abdomen may show obliteration of the psoas shadow and diffuse flank opacity, rather than a clear kidney outline.

Rupture of the urinary bladder most often occurs when there is fracture of the pelvis. Pain is severe and located suprapubically. There is marked tenderness and rigidity of the lower portion of the abdomen. If the rupture is intraperitoneal, bowel sounds will usually be absent. Hematuria is usually present. Cystoscopic examination may reveal a bladder tear. Discrepancy between a known amount of sterile solution introduced by catheter into the emptied bladder and the amount recovered suggest a rupture of the bladder. A cystogram with opaque media may also reveal extravasation.

Rupture of ectopic pregnancy: A history of a missed menstrual period, vaginal spotting, and findings limited to the lower abdomen are significant differential factors in rupture of ectopic pregnancy.

Retroperitoneal hemorrhage occurs infrequently and is usually diagnosed as intra-abdominal hemorrhage, since there is little on which to base a specific diagnosis. Back pain, shock, anemia, and loss of psoas

shadow on the x-ray film suggest this diagnosis.

Treatment

Abdominal exploration with *splenectomy* was done in all cases of traumatic rupture of the spleen as soon as possible after the diagnosis was made or suspected. With the knowledge that severe shock, usually the result of delay in therapy, is one of the principle causes of high mortality, *early attempt at recognition* and *early operation* were fundamental principles of therapy.

Supportive therapy was instituted as soon as the patient showed any evidence of severe blood loss or impending shock. Whole blood was used in all instances, although other infusions were frequently started until blood could be obtained. Intestinal suction was used to prevent the symptoms of ileus. Carbon dioxide, deep inhalations, coughing, frequent turning, and bronchoscopy in one instance were used to prevent and treat atelectasis.

Complete examination for other injuries has also been a fundamental principle in the handling of all traumatic patients.

Summary

Sixteen cases of rupture of the spleen have been reviewed from the standpoint of etiology, diagnosis (with emphasis on the x-ray findings), treatment, complications, and mortality.

Although most ruptured spleens are due to trauma, spontaneous rupture must be kept in mind in the diagnosis of acute conditions of the abdomen. Rupture is frequently delayed, a point that should be

remembered when there is a history of trauma.

A history of trauma followed by dizziness, fainting, abdominal pain most severe in the left upper quadrant and occasionally radiating to the left shoulder, abdominal tenderness and rigidity, absent or diminished bowel sounds, increased pulse, shock, and anemia were the most constant clinical features. Associated injuries occur frequently.

A large left upper quadrant mass with loss of splenic outline, elevation of the left side of the diaphragm, compression of the stomach shadow, deformity or displacement of the splenic flexure of the colon, and serrations of the greater curvature of the distended stomach are the most important roentgenologic diagnostic features.

Prompt surgery, as soon as the diagnosis was made or suspected, and supportive therapy were largely responsible for the absence of fatalities in the present series of traumatic ruptures. Four cases were complicated by atelectasis, and 2 by intestinal obstruction.

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Acute Appendicitis in Femoral Hernia

JAMES F. MARSHALL, M.D.

WINSTON-SALEM

The first report of an appendectomy was that by Claudius Amyand, who performed this operation on an 11 year old boy with an abscessed appendix in a scrotal hernia in 1735 at Saint George's Hospital, London. He reported this event in the Philosophical Transactions of the Royal Society in October, 1736. It carried the quaint title, "The Inguinal Rupture With A Pin In The Appendix Coeci Incrusted With Stone And Some Observations On Wounds In The

Guts."⁽¹⁾ De Garengot had reported a case of an appendiceal abscess in a hernia in 1731, but did not remove the appendix⁽¹⁾.

Richard Hall performed the first appendectomy in the United States in 1886, at the Roosevelt Hospital, New York City⁽¹⁾. Interestingly enough, this was also a gangrenous appendix in an inguinal hernia.

Incidence

Although the appendix is found more commonly in inguinal than in femoral

hernia, it is more apt to become strangulated or inflamed in the latter, owing to the small aperture through which it slips. Furthermore, it is more commonly found in middle-aged and elderly women than in men. As a matter of fact, writing in 1941, Seley⁽²⁾ was able to find only 8 cases in men in which the appendix was acute or strangulated. Wood⁽³⁾ reported on 100 cases, including 2 of his own, in 1906. Of these, 63 were described as inflamed, gangrenous, perforated or strangulated. William B. Coley⁽⁴⁾, in Keen's *Surgery*, published in 1908, stated that of 140 patients with femoral hernia operated upon by him, not one had the appendix in the hernia sac; whereas, out of 1,874 patients with inguinal hernia, he found the appendix in 36.

More recently McClure and Fallis⁽⁵⁾ reported on 90 operations for femoral hernia, in 2 of which the hernia contained the appendix and in 1 of which it was gangrenous. Incidentally, the ratio of their operations was one femoral hernia to every 50 inguinal. Wakeley⁽⁶⁾ found the appendix present in the femoral hernia sac in 3 out of 610 cases, and in 1 it was acute. Koontz⁽⁷⁾ reported on 139 patients operated upon for femoral hernia at the John Hopkins Hospital during the 21 year period 1925-1946. In 2 of these the appendix was found in the sac, and in one it was strangulated.

Young⁽⁸⁾ collected from the literature 223 cases of acute appendicitis in the femoral hernia sac and added 1 of his own in 1949—making a total of 224. Since that time, I have found reports of 8 more cases^(1,9).

From a study of the various reports in the American and British literature, one could expect to find the appendix in a femoral hernia in about 1 per cent of patients, and that it would be strangulated, inflamed, gangrenous or abscessed in about 0.5 per cent.

Diagnosis

It is astonishing that a correct preoperative diagnosis is almost never made. In my search I could find only one recent report of a case which was correctly diagnosed in advance^(9f). It is evident that the various surgeons have not had a high index of suspicion for the lesion. Some of the diagnoses have naturally involved lymphadenitis^(8,9a,b), since enlarged tender nodes were

palpable in the groin. Usually the diagnosis is that of strangulated or incarcerated femoral hernia.

Almost all of the patients complain of pain in the right groin. Often there is a history of generalized or paraumbilical pain which may be accompanied by nausea, but commonly without vomiting. The pain, at times, is colicky, but may be rather vague in the beginning. It then shifts to the groin, where the patient becomes aware of a painful swelling. The mass may or may not have been present before onset. The bowels are usually not obstipated, contrary to the findings with strangulated hernia. This, together with absence of frequent vomiting, is most important in the differential diagnosis. Some patients will have frequency and burning on urination early in the attack. Fever may be present, depending upon the progress of the inflammatory reaction. Leukocytosis is usually present. A flat plate of the abdomen does not present the findings of intestinal obstruction with gas filled loops of small bowel and/or fluid levels.

On physical examination the abdomen is usually not distended, nor is it tender. A tender, irreducible mass is always present in the groin. There is no impulse on coughing or straining. The overlying skin may be pink or red, depending upon the degree of the inflammatory reaction. Given the foregoing history and findings, one should strongly suspect an acutely inflamed appendix in a femoral hernia sac.

Treatment

With regard to treatment, fluid and electrolyte imbalances should be corrected, if present, and then the patient should be operated on. If an abscess is present, it should be drained and left alone at the time of operation. Later on the appendix should be removed and the hernia repaired, if necessary. The inflammatory reaction will often have healed the hernia. The incision should be so placed that it can be extended above, if necessary, to remove the appendix through an abdominal approach. Dividing Poupart's ligament will free the appendix and sac so that both can be dealt with in proper fashion. If the appendix is gangrenous, the wound should be drained and the patient given antibiotics in the postoperative period.

Two patients with acute appendicitis in femoral hernia sacs encountered in my

private practice in the summer of 1955 stimulated me to look up the literature on this subject and to write this report. In neither instance was the correct diagnosis suspected, although proper evaluation of each case—certainly the first—should have suggested, if not confirmed, the diagnosis.

Illustrative Cases

Case 1

A 70 year old woman was admitted to the hospital on May 8, 1955, with a chief complaint of pain in the right groin. She had been well until five days previously, when she began to have low grade, colicky pain in the right lower quadrant, associated with nausea but no vomiting. The next day she had fever and diarrhea, which subsided in about 48 hours. The pain was then mild. She thought she had "flu." On the day of admission, she noted a tender mass in the right groin, which had not been present before. She had had no pain or burning on micturition. She had a bowel movement on the day of admission. There had been no ulceration or infection about the perineum or right lower extremity. For several years she had noted mild epigastric fullness and discomfort after eating. This was not related to any type of food.

On admission the temperature was 101 F., the pulse 88. Physical examination revealed a slender, fairly healthy-looking woman of 70. The head, neck, breast, and cardiovascular systems were normal. The lungs were clear. Abdominal examination revealed mild tenderness of the lower part of the abdomen with rather marked tenderness over an "egg-sized," rather firm mass in the right groin. The skin was erythematous. Pelvic and rectal examinations were negative. There were no lesions or inflammatory processes involving the right lower extremity.

The white blood cell count on admission was 12,000, with 81 per cent neutrophils and 2 bands. The hemoglobin was 13 Gm. and the red blood cell count 4,340,000. A specimen of catheterized urine showed 12 to 14 white blood cells per high power field. The Kline test was negative.

A diagnosis of acute lymphadenitis was made and the patient placed on antibiotic therapy (penicillin and streptomycin).

On May 10, the white cell count was 13,750, with 70 per cent neutrophils and 2 bands.

The patient was seen by the author in surgical consultation, and a diagnosis of abscess of the groin, etiology undetermined, was made.

Incision and drainage was performed on May 11, 1955, by me. About 400 cc. of thick, foul-smelling pus with the characteristic colon bacillus odor was evacuated. After the pus was evacuated, a well defined cavity below Poupart's ligament in the region of the femoral canal was palpated. At the bottom of this cavity could be felt a finger-like protusion, measuring 2 by 1 cm., which was

thought to be the tip of the appendix, acutely inflamed and perforated.

The process cleared up rather rapidly, and on the ninth postoperative day a barium enema revealed partial filling of the appendix in "low position with spasm of the cecum—the appearance most suggestive of previous rupture of the tip of a fixed pelvic appendix."

The patient was discharged on May 20. She was re-admitted on July 24, 1955, for operation.

At operation on the following day a low, right rectus muscle-retracting incision was made. The appendix was found to be incarcerated in the femoral canal on the right. It was 10 cm. in length. The fibrosed tip of the appendix was divided flush with the distal aspect, which occluded the femoral canal. The appendix was then removed.

Since there was now no evidence of hernia, nothing further was done. The abdomen was closed without drainage, and the patient made an uneventful recovery without antibiotics. The high postoperative temperature was 100.4 F. on one occasion. It was normal by the third postoperative day and remained so until her discharge on the eighth.

In October, 1956, she had no evidence of hernia when examined by me.

Comment

The absence of any evident lesions of the right leg or about the vulva and anus, together with the history of mild abdominal pain without obstipation and vomiting, should have made one at least suspect the presence of a gangrenous appendix in the femoral sac in this patient.

Case 2

I first saw this 66 year old woman in my office, on July 27, 1955, because of a hernia in the right groin.

She had first noted "soreness" in this location about the fourth or fifth of July, 1955, the day after picking blackberries with some children and going under a fence. There was no abdominal pain or nausea. Four days later she began having "shooting pains" in the groin. These gradually disappeared. Since that time she had noted a mass, which she took to be a hernia in her groin.

Her health had been generally good, with no digestive disturbances. She was usually constipated and took laxatives.

Her past history was noncontributory. Physical examination revealed a healthy-looking, obese woman of 66 years of age. Abdominal examination revealed a rounded, tense, slightly tender, irreducible mass, 6 cm. in its greatest diameter, at and below Poupart's ligament on the right. There was no impulse on coughing.

Pelvic and rectal examinations were negative, except for rectocele. A diagnosis of femoral hernia was made and surgical repair advised.

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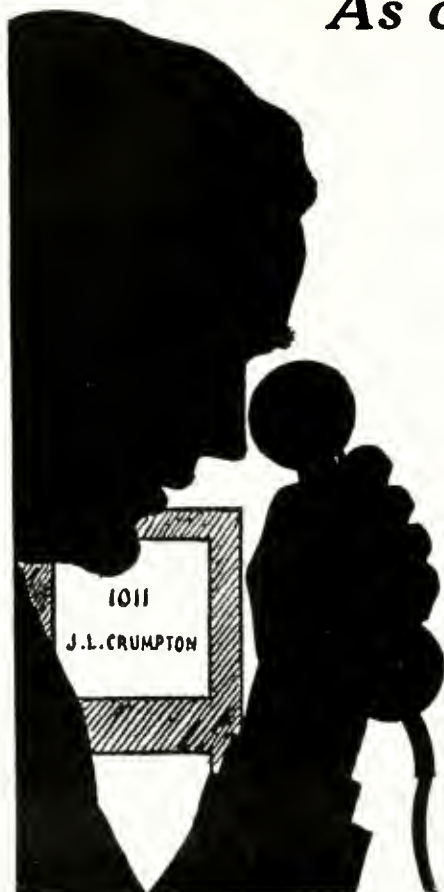
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On admission the white blood cell count was 5,500, with 56 per cent polymorphonuclears. The hemoglobin was 13 Gm. and the red blood cell count was 4,500,000. Urinalysis and Kline test were negative.

On August 1, 1955, the patient was operated on. An incision was made medial and parallel to Poupart's ligament and carried down to the femoral hernia sac. It was opened and found to be filled with sero-sanguineous fluid and the distal end of the appendix which was inflamed and incarcerated. By dividing Poupart's ligament, the sac and appendix were freed. The appendix was allowed to fall back in the abdominal cavity, the sac was excised, and the femoral hernia was repaired by resuturing the divided ligament and closing the hernial opening with mattress sutures of silk between Poupart's ligament and the pectineus fascia. The incision was extended upward, so as to become a McBurney type. The aponeurosis was divided, as were the muscles and peritoneum. The appendix was then removed and the wound closed in layers with silk.

The patient's convalescence was uneventful. The postoperative temperature reached a high of 100 F. on two occasions and then became normal.

The pathologic diagnosis was subacute appendicitis.

The patient was discharged on the seventh postoperative day, with the wound healing *per primam*. When last seen by me on September 20, 1955, the wound was healed and there was no recurrence of the hernia.

Comment

Although the signs of inflammation were lacking in this patient, I believe that the diagnosis of an acutely inflamed appendix in a femoral hernia should have been entertained, because of the slight tenderness over the sac and the history of soreness and "shooting pains" in the groin.

Summary

The American and English literature on the subject of acute appendicitis in femoral hernia sacs has been reviewed. Two additional cases have been reported, making a total of 234 cases to date.

The salient diagnostic features have been

emphasized: namely, right lower abdominal or periumbilical pain, usually of a mild nature, accompanied by nausea but usually no vomiting in middle-aged and elderly women, shifting to the groin with the appearance of a tender mass; the absence of obstipation; fever and leukocytosis, depending upon the degree of inflammatory reaction present; the discoloration of the overlying skin; dullness to percussion over the mass, absence of the cough impulse; and finally the absence of the usual signs of intestinal obstruction on flat plate of the abdomen.

It is felt that the correct diagnosis can be made more often if the condition is kept in mind and considered in the differential diagnosis.

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Spondylosis and Angina Pectoris

FRED M. DULA, M.D.

LENOIR

Spondylosis, primarily an inflammatory involvement of articular surfaces of the vertebral column, is a frequent cause of radicular pain simulating angina pectoris of cardiac origin.

Since a diagnosis of angina pectoris is of such smashing impact upon the patient, it is of utmost importance to consider other causes of thoracic pain before pronouncing this diagnosis. All too many iatrogenic cardiac cripples have resulted from neglect of this admonition. The differential diagnosis in the presence of such pain is admittedly difficult, since both angina pectoris and spondylosis occur most frequently in the same age group. By the same token, the two conditions may co-exist in the same patient.

Mechanism of Pain

As regards the mechanism of pain in spondylosis, fibers of the cervical nerves and the upper thoracic segments supply the articular surfaces of the corresponding vertebrae, the intervertebral capsular, ligamentous and fascial structures, the cervical group of muscles, and the muscles of the shoulder girdle. These spinal nerves also carry filaments of the autonomic nervous system which supply the cervical and dorsal ganglia of homologous as well as superjacent and subjacent levels through intercommunicating fibers connecting these ganglia.

Dystrophies of the cervicothoracic spine, therefore, are capable of both directly and reflexly initiating pain syndromes normally initiated by the ganglia themselves. By the same mechanism they are capable of causing concomitant irregularities of cardiac function in the form of tachycardia, extrasystoles, and even transient changes in the electrocardiogram, since both afferent and efferent impulses of the cardiac mechanism are mediated by the sympathetic ganglia of the involved cervicothoracic area.

Associated with spondylosis of the cervicothoracic area are not only the root-compression neuropathies of both sensory and motor character — that is, paraesthesia, anesthesia, motor weakness, and paralysis

—but also myositis, fibrositis, and fibrosis of the muscle, ligaments, and fascia served by the involved nerves. These latter phenomena are probably of neurotrophic origin, associated with the metabolic changes of disturbed nerve supply.

In this connection, I believe that the so-called "shoulder-girdle syndrome," so long attributed to coronary artery disease, is in reality a manifestation of cervicothoracic spondylosis which is not clinically recognized in those patients with co-existent coronary pathology.

Associated with cervicothoracic spondylosis is frequently found similar involvement of the xyphoid-gladiolar articulation, with consequent xyphoidalgia. Pressure on the xyphoid or the pull of the recti muscles in such cases can give rise to substernal pain.

Roentgenographic Signs

X-rays of the cervical spine in spondylosis will reveal lipping and spur formation of the vertebral articular surfaces, with projection of bony spurs posteriorly into the spinal canal, severely reducing the diameter of the canal itself as well as the size of the intervertebral foramina. Degenerative changes in the intervertebral discs are frequently observed, with collapse of certain of these structures and consequent narrowing of intervertebral spaces. Herniated nucleus pulposus is not uncommon. Normal lordosis of the cervical spine may be lost.

Onset of Pain

The pain syndrome of cervicodorsal spondylosis may be initiated by exertion or emotional upsets, as in the case of angina pectoris of coronary origin. Any circumstance which increases the tonus of the cervicothoracic musculature may, by increasing intervertebral pressure or nerve-root compression, set off the typical explosive pain reaction.

The pain of spondylosis is more frequently of positional origin, and when initiated by physical exertion requires much less activity to set it off than does angina pectoris of less than severe degree. In spondylosis, however, the pain ceases or diminishes as the activity continues, while the opposite

is true in angina pectoris. Flexion of the cervical spine, especially when some combined rotation is involved, may initiate an attack.

Stooping to pick up an object, drive a nail, or set a golf tee; straining at stool, rapidly turning a steering wheel, giving a quick turn of the head, or some similar mild activity may produce the pain syndrome of spondylosis. Conversely, hyperextension of the cervical spine may trigger an attack.

Attacks are likely to occur during an auto trip, especially if the driver tends to slump over the steering wheel. Or they may occur when he gets out of the car and starts walking. At home, attacks are frequent when the patient slumps in an easy chair to read or watch television. Frequent attacks occurring without obvious exertion—while the patient is seated in an easy chair or on morning stool; while he is shaving, washing the face, or performing other minimal activity—might be considered pathognomonic of cervicodorsal spondylosis. Attacks are likely to occur when certain positions are assumed in bed, especially when the patient first lies down. I believe that so-called “decubitus angina” is in reality due to spondylosis, not cardiac distress. One's coronary capacity would have to be quite seriously impaired to be incapable of withstanding without embarrassment the momentarily increased circulatory burden of lying down.

Subjective Characteristics

Certain subjective characteristics of the pain syndrome of spondylosis will further help in differentiating this condition from angina pectoris. In the former, pain seems to begin in the back rather than substernally. The point of origin is usually in the region of the upper angle of the scapula, from which it migrates anteriorly to a mediopectoral rather than a substernal site.

At the same time it migrates to the base of the neck, the angles of the jaws, the elbows, the forearms, the hands and fingers. There is, however, no accompanying substernal oppression, tightness of chest, or embarrassment of respiration.

Although the pain spreads bilaterally, its origin is unilateral, and points of tenderness, as well as trigger-zones capable of setting off the pain complex, may be found in the upper scapulovertebral area of the affected side. Pressure over these areas may not only initiate an attack, but also may even abort or ameliorate an attack which has started spontaneously.

The frequency and severity of the attacks increase on the approach of cold, damp weather. It might be said that such a patient carries his own rheumatoid barometer, as does the victim of other rheumatoid states. Like rheumatoid conditions in general, attacks are usually more frequent at morning than at other times of day. They are also more frequent during periods of nervous tension or emotional upset.

Summary

Cervicothoracic spondylosis may produce pain syndromes similar to, and easily mistaken for, angina pectoris of cardiac origin.

A careful differential analysis is necessary in order to avoid the harm which a mistaken diagnosis of coronary insufficiency may cause.

I believe that the current practice of attributing the origin of “shoulder-girdle syndrome” and “decubitus angina” to coronary artery disease is erroneous; and that both of these conditions are the result of cervicothoracic spondylosis.

The co-existence of cervicothoracic spondylosis and coronary artery disease is probably quite frequent, since both conditions are found primarily in the same age group.

The continuing national health survey is under way. Each month from now on, 140 Census Bureau interviewers will visit 3,000 homes, asking questions about illness and disability. On the basis of the data collected, the Public Health Service will publish national and regional reports on morbidity and mortality.

Facts About Nursing Education in North Carolina

Committee on Nurse Registration and Nursing Education

In an effort to understand and determine what needs to be done in order to provide a sufficient number of qualified nurses to meet our needs, we should like to share with you a look at our source of supply, with regard to quality and quantity. We will then give some consideration as to what we need to do.

Before facing our needs, we commend to you the 31 three-year programs in our hospital schools of nursing. They have made consistent progress in the past few years, and are turning out well qualified nurses.

The collegiate programs are fast becoming an integral part of the preparation of faculty members for teaching and administrative duties. The practical nurse programs are gaining in popularity every year, and it appears that the time is approaching when more practical nurses will be used in our hospitals.

Especially would we like to express to the medical profession, the Hospital Administrators' Association, and the Nurses' Association our appreciation for their interest and cooperation in making the nursing profession in North Carolina what it is today. Their continued joint interest in nursing education is essential for its continued progress in our state today.

The North Carolina Board of Nurse Registration and Nursing Education sees, as one of its chief responsibilities, a need to encourage and promote programs in nursing education sufficient in number, size and quality to help meet the pressing demands for nurses on all fronts. The Board sees also the need for a willingness on the part of all allied groups to join hands in this effort.

May we share with you some facts about nursing in North Carolina as we see them today, in the hope that through knowledge

and understanding we can effectively plan together ways and means of meeting our needs?

Achievements and Estimated Needs

Because you are all well aware of North Carolina's Good Health Movement, we will not recount what you already know about the increases in the number of hospital beds, the increased tempo in admissions and discharges, and the technological and scientific advances in patient care. All these forces have direct implications for the graduate nurse as she finds herself employed in our hospitals and communities.

May we refer to a study that was published in 1950 under the direction of a committee appointed by the president of the University of North Carolina, Dr. Gordon Gray? This committee was jointly sponsored by the North Carolina Medical Care Commission and the University of North Carolina for the purpose of trying to determine our nursing needs for a ten-year period. This committee saw its task as one of determining what should be done on a long range basis.

In 1950, on the basis of projected need, it was estimated that North Carolina by 1960 would need 13,270 employed registered nurses. The committee further concluded that while the need of qualified supervisors was acute in 1950, it would be even more so in 1960.

And as critical as the supervisors' picture was in 1950, the committee said that the need for "top flight" teachers and administrators could be expected to continue. And it has.

In order to meet the minimum standards of nursing by 1960, the committee said that we would need to train and educate nurses on three levels:

1. Baccalaureate degree programs for basic and professional postgraduate students
2. Diploma programs in hospitals
3. Practical nurse training programs.

It was anticipated that by 1960 the division of nurses among the three categories should be approximately equal. This meant, according to committee statistics, that 600 with baccalaureate degrees, 600 with R.N.

*This paper was edited by the following members of the North Carolina Board of Nurse Registration and Nursing Education:

Moir S. Martin, M.D., F.A.C.S., Vice-Chairman, Mount Airy.

Miss Vivian Culver, R.N., Executive Secretary and Educational Consultant, Raleigh.

Miss J. Elizabeth White, R.N., Secretary, Director of Nurses, Charlotte Memorial Hospital, Charlotte.

J. Grayson Brothers, F.A.C.H.A., Administrator, Grace Hospital, Morganton.

diplomas, and 600 practical nurses would have to be graduated each year.

In 1950 we graduated 700 nurses from 37 three-year diploma schools. We had no four-year collegiate programs at that time, but we did graduate 53 practical nurses from eight schools that year.

Where did we stand at the end of 1956, seven years later?

1. In 1950 we licensed 9,126 registered nurses, 5,824 of whom were employed, an increase of 3,176 employed nurses, or 530 per year.

An estimated 9,000 are working in North Carolina at the present time. This means that we need to put about 4,000 more registered nurses into practice in North Carolina by 1960 in order to meet the goal of 13,270 employed nurses. At the present rate of increase, it will take eight years instead of three to do this.

Factors to be Overcome

Why are we moving so slowly in meeting this urgent need? The reasons are many and important.

1. *The need to do a better job of recruiting capable students into training than we do now is vital.* Then we have to develop programs sufficiently good to hold them. Our drop-out rate is roughly 35 to 40 per cent. Some schools lose from 60 to 70 per cent of their students through withdrawals. (The national drop-out rate is about 30 per cent.)

Student recruitment is highly competitive today — not only within the discipline of nursing itself but between nursing and other fields of work open to girls. The demand for women in business and industry is increasing. This naturally affects the number of young women available for nursing.

In order to get the numbers we need, we must work even harder to offer attractive quality programs. There are no better recruiters than satisfied students and graduates.

Stuart Knox, executive director of the Connecticut Hospital Association, has stated: "The shortage of nurses will not be solved by training more people badly, but by training more people better." This seems to us to make sense. We need more nurses, but we need to train them better. Our problem is how to have quality programs and hold quantities of students on

through to graduation, and do this as economically as possible.

2. Another reason we are moving so slowly is that *we lose two nurses to other states for every one nurse who enters North Carolina to practice.* We need to know why this is happening in order to find some way to turn the tide. In 1956 we lost 222 more than we took in.

3. At the last available count, *one North Carolina girl out of every five going into nursing went out of the state to study.* Do they return? Why do they go out of the state in the first place? It would be helpful to know the reasons.

This might be due in part to the quality of programs available to them in our state. In 1956 we had 99 unfilled vacancies in our schools of nursing. Why? We need to know.

The average performance of our graduates in the licensure examination fluctuates from year to year. In 1952 we were at the bottom; last year we were fourth from the bottom in medicine, surgery and obstetrics, fifth from the bottom in pediatrics, and sixth from the bottom in psychiatry.

The pulling power of our schools seems to be limited almost entirely to North Carolina. Yet we have several schools fairly close to three adjoining states. Would stronger schools draw recruits from other than the local community?

Outlook for the Present and Future

Today we have 31 three-year hospital schools of nursing with 2,259 students enrolled and 4 collegiate programs with 598 enrolled; we have 9 practical nursing programs with 166 enrolled.

The 1956-1959 listing of all approved schools in our state includes some important facts about the three different types of programs we now have.

This year we will graduate about 675 nurses from our hospital schools, about 100 from our degree schools, and about 160 practical nurses.

According to the survey of 1950, our three-year schools are now producing as many nurses as our estimated need — 600 annually.

Statistics show that since four-year degree schools opened in North Carolina, beginning in 1951, enrollment in hospital schools has dropped from 2,425 in 1951 to 2,259 in 1956 — a decrease of 166. Through

the period of activation of the four degree programs, we have increased enrollments from 26 in 1951 to 598 in 1956. This gives us a nearly all-time high of 3,023 students enrolled in all types of schools in North Carolina. And it is predictable that the next two years will see the enrollments in the degree programs increasing even more.

If we can hold the degree graduates in our state, we should in time have a sizeable group from which to draw administrative personnel to help our acute shortages in this area.

What We Need to Do

We need to more than triple the number of practical nursing students in order to fulfill an annual estimated quota of 600. This problem would seem to need some study.

Regarding our diploma schools, we can estimate that if the trend toward decreased enrollments continues, we will fall short of our annual goal of 600. If we can have between 2,400 and 2,500 students in diploma programs and cut our drop-out rate in half, our annual supply from that source can easily be 700 or more.

To cut our drop-out rate, we must examine our programs critically. An objective, critical analysis points to several things we need to do to strengthen our position.

As previously stated, conducting a school of nursing, or any other school for that matter, is a costly operation, one which becomes frightening when studied carefully. It is entirely possible to operate such an endeavor on a joint basis with colleges and thereby reduce costs, yet offer a stronger program in the end.

Within the past year federal funds have

been made available through the State Department of Vocational Education for the establishment of additional schools of practical nursing. Every effort should be made to plan these programs with care so that each will continue to serve as a source of prepared nursing personnel.

We have learned that consolidation in general education is an accepted policy. When there are several hospitals in an area, what is to prevent their joining hands in this effort and establishing a school — an autonomous unit on its own budget—supported by the several hospitals and/or a junior college? Students could be taught centrally for some phases of the program and then rotated through the member hospitals for clinical training. In this way only one faculty would be recruited, but the budget could support salaries sufficiently inviting to attract qualified personnel if available. It might even attract qualified people from other states to turn the tide of two nurses leaving the state to one coming in.

As we see it, opening a certain number of schools does not necessarily mean that our needs will be met. We do need sufficient programs open to have some 2,400 students in hospital schools, but we also need to strengthen our programs to hold the students to graduation and practice in North Carolina if our needs are to be met.

The North Carolina Board of Nurse Registration and Nursing Education invites the interest and support of this organization along with others to join with them in planning constructively together for increased and improved facilities for providing more and better nurses for North Carolina.

There is an area of radiological romance which is bounded above by the pylorus and below by the ileocaecal valve. This stretch of gut, as yet inaccessible to even the most determined endoscopist, provides material for the doubtful claims of duodenitis, jejunitis, and ileitis. Once these labels have been accepted by doctor and patient the incentive to search for a rational explanation of symptoms wanes and leads to treatment for a condition which seldom exists. Not many years ago gastritis was confidently diagnosed on radiological observation of the mucosal pattern, but it was fortunately put into right perspective by the advent of the gastroscope and mucosal biopsy. In short, it takes many years for us to find the limits of normal in respect of any new mode of assessment, be it radiological or biochemical. Douthwaite, A.H.: Pitfalls in Medicine, Brit. M.J. 2:897 (Oct. 20) 1956.

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"The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration. Whoever chooses this profession assumes the obligation to conduct himself in accord with its ideals"—Principles of Medical Ethics of the American Medical Association, Chapter 1, Section 1.

JUNE, 1957

THE SCIENTIFIC MEMBERSHIP

Before this year's meeting in Asheville our Medical Society had met for nine consecutive years in Pinehurst, with the Carolina Hotel as headquarters. Only four meetings, including the Cruise to Bermuda, have been held elsewhere since 1938. As most of our members well know, the meeting place was changed to Asheville this year solely for the benefit of Negro physicians, for whom the scientific membership had been created. After the prolonged effort made to offer them the opportunity to participate in the scientific and business sessions of the Society, it was disappointing to see only two Negro physicians present at the Asheville meeting. It is still more disappointing to many white physicians who fought valiantly

for this membership for our Negro friends to read an Associated Press story in the morning papers of June 12 stating that at its opening meeting in Greensboro on June 11 the Old North State Medical Society censured two of its members for accepting scientific membership in the Medical Society of the State of North Carolina.

According to the AP story, the question of censure was raised by Dr. W. T. Armstrong, secretary-treasurer of the Old North State Society, who said that the executive committee had requested all members of that society "to refuse any invitation to 'scientific membership' in the Medical Society of North Carolina." Dr. Armstrong was further quoted as saying that "such membership . . . excludes the Negro members of the Medical Society of North Carolina from most social functions and from elective offices."

Dr. Armstrong probably did not mean to tell an untruth; but he might have taken the trouble to consult the Constitution and By-Laws of the State Society. Article III, Section 8, of the Constitution reads: "Scientific Members are those physicians other than white who are admitted with the privilege of participating in the scientific and business sessions of the Society *and of voting and holding office.*" (Italics ours.) Chapter I, Section 1 of the By-Laws reaffirms this promise.

Dr. Leroy R. Swift, president of the Old North State Society, cast the sole vote against the motion to censure the two members. It is said, however, that "Several did not vote." It may be that Dr. Swift and those who did not vote recalled the frank but friendly discussions in 1955 between the committee from our State Society and representatives of the Old North State Society. The result of the discussions may be summarized in a few quotations from the report of the committee (Dr. Street Brewer, chairman; Dr. Ben Royal, and Dr. Paul Whitaker):

"The spokesman for the Negro physicians at the meeting, in effect pledged themselves that they would use their influence among members of their race to prevent any attempt to acutely disturb the present social customs pertaining in our state, and to aid in working toward a gradual and evolutionary solution of this admittedly intricate and potentially explosive problem . . .

"We believe that the meeting of your Committee with representatives of the Negro physicians has resulted in a mutuality of understanding and feeling not heretofore achieved. As a result of our studies of the problem, we believe it is the earnest desire of the Negro leaders to preserve for the present the social customs now pertaining, and to approach any change in same in a careful and evolutionary manner.

"This, it seems to your Committee, would meet the desires and ambitions for scientific opportunity as medical men as expressed to your committee by the leaders of the Old North State Medical Society. It would in effect allow them to become members of the A.M.A. with the privileges and opportunities that such membership affords."

It is evident that there has been a change in the attitude of the leaders of the Old North State Society, who now apparently do not appreciate the great and sincere efforts made on their behalf by members of our State Medical Society. An encouraging fact, however, is that President Leroy Swift voted against the recommendation to censure the two "culprits," and that a number—reliably estimated to be about a third of the Old North State members present—did not vote. Surely there are enough men of good will in both races to work out "a gradual and evolutionary solution of this admittedly intricate and potentially explosive problem."

* * *

THE POTENCY OF DIGITALIS PREPARATIONS

In view of the claims made that the effective dose of certain digitalis preparations, especially the glycosides, is less toxic than the corresponding dosage of other preparations, a recent article in the *New England Journal of Medicine*⁽¹⁾ is timely. The authors have made a comparative study of one of the glycosides and whole digitalis leaf. They conclude that "In any given case, a decreased toxicity of one preparation was accompanied by a decreased potency and an increased potency by an increased toxicity."

This conclusion brings us back to the criteria established by Witherington, the first doctor to recognize the therapeutic value of digitalis. Our readers will recall

that he advised that the drug "be continued until it acts either on the kidneys, the stomach, the pulse, or the bowel; let it be stopped upon the first appearance of these effects."

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* * *

NURSING EDUCATION IN NORTH CAROLINA

A thoughtful and thought-provoking paper, "Facts About Nursing Education in North Carolina," read by Dr. Moir S. Martin at the Asheville meeting of the House of Delegates, is published in this issue of the NORTH CAROLINA MEDICAL JOURNAL.

The facts presented in the paper speak for themselves, and need not be elaborated—except to say that it would seem that North Carolina, with three four-year medical schools, could and should improve its record of the past decade, in training nurses to replace those who, for one reason or another, drop out of the ranks.

It is to be hoped that every member of the State Medical Society will read this paper, and then highly resolve that he will do his best to encourage more worthy young women to enter the nursing profession.

* * *

MEDICAL SOCIETY DUES REDUCED AFTER JULY 1

For many years July 1 has been an important date for many young doctors serving or expecting to serve as house officers, since it marks the beginning or the end of the hospital "year," and consequently of their status. Most young doctors who complete their hospital training plan to begin practice soon after that date. For the benefit of these young men—as well as any others who join our State Society after July 1—the dues for membership in the Society will be reduced by one half for the remainder of the year. The American Medical Association dues will also be only one half the regular annual dues. This means that for the rest of the year 1957, new members will have to pay the State Society only \$20.00, the A.M.A. \$12.50. It is to be hoped that a number of young men beginning their practice after July will take advantage of this bargain.

Committees and Organizations

THE RESPONSIBILITIES OF THE MEDICAL PROFESSION IN THE USE OF X-RAYS AND OTHER IONIZING RADIATION

*Statement by the United Nations Scientific
Committee on the Effects of
Atomic Radiation*

1. The United Nations General Assembly, being aware of the problems in public health that are created by the development of atomic energy, established a Scientific Committee on the Effects of Atomic Radiation. This Committee has considered that one of its most urgent tasks was to collect as much information as possible on the amount of radiation to which man is exposed today, and on the effects of this radiation. Since it has become evident that radiation due to diagnostic radiology and to radio-therapy constitutes a substantial proportion of the total radiation received by the human race, the Committee considers it desirable to draw attention to information that has been obtained on this subject.

2. Modern medicine has contributed to the control of many diseases and has substantially prolonged the span of human life. These results have depended in part on the use of radiation in the detection, diagnosis and treatment of disease. There are, however, few examples of scientific progress that are not attended by some disadvantages, however slight. It is desirable therefore to review objectively the possible present or future consequences of increased irradiation of populations which result from these medical applications of radiation.

3. It is now accepted that the irradiation of human beings, and particularly of their germinal tissues, has certain undesirable effects. While many of the somatic effects of radiation may be reversible, germinal irradiation normally has an irreversible and therefore cumulative effect. Any irradiation of the germinal tissues, however slight, thus involves genetic damage which may be small but is nevertheless real. For somatic effects there may however be thresholds for any irreversible effects, although if so these thresholds may well be low.

4. The information so far available indicates that the human race is subjected to natural radiation,⁽¹⁾ as well as to artificial

radiation due to its medical applications, to atomic industry and its effluents and to the radioactive fall-out from nuclear explosions. The Committee is aware of the potential hazards that such radiation involves, and it is collecting and examining information on these subjects.

5. The amount of radiation received by the population for medical purposes is now, in certain countries, the main source of artificial radiation and is probably about equal to that from all natural sources. Moreover, since it is given on medical advice, the medical profession exercises responsibility in its use.

6. The Committee appreciates fully the importance and value of the correct medical use of radiation, both in the diagnosis of a large number of conditions, in the treatment of many such diseases as cancer, in the early mass detection of conditions such as pulmonary tuberculosis, and in the extension of medical knowledge.

7. Moreover, it appreciates fully the contribution of the radiological profession, through the International Commission on Radiological Protection²⁾ in recommending maximum permissible levels of irradiation. As regards those whose occupation exposes them to radiation, the establishment of these levels depends on the view that there are doses which, according to present knowledge, do not cause any appreciable body injury in the irradiated individual; and also on the consideration that the number of people concerned is sufficiently small for the genetic repercussions upon the population as a whole to be slight.

Whenever exposure of the whole population is involved, however, it is considered prudent to limit the dose of radiation received by germinal tissue from all artificial sources to an amount of the order of that received from the natural background radiation.

8. It appears most important therefore that medical irradiations of any form should be restricted to those which are of value and importance, either in investigation or in treatment, so that the irradiation of the population may be minimized without any impairment of the efficient medical use of radiation.

9. The Committee is consequently anxious to receive information through appropriate governmental channels as to the

methods and the extent by which such economy in the medical use of radiation can be achieved, both by avoiding examinations which are not clearly indicated and by decreasing the exposure to radiation during examinations, particularly if the gonads or the foetus during pregnancy lie in the direct beam of radiation. It seeks, in particular, to obtain information as to the reduction in radiation of the population which might be achieved by improvements in instrument design by fuller training of personnel, by local shielding of the gonads, by choosing appropriately between radiography and fluoroscopy, and by better administrative arrangements to avoid any necessary repetition of identical examination.

10. The Committee also seeks the cooperation of the medical profession to make possible an estimate of the total radiation received by the germinal tissue of the population before and during the child-bearing age. It considers it to be essential that standardized methods of measurement, of types at present available, should be widely used to obtain this information and it emphasizes the value of adequate records, maintained by those using radiation medically, by the dental profession, and by the responsible organizations in allowing such radiation exposure to be evaluated. The Committee is convinced that information of this type will make it possible to decrease the total medical irradiation of the population while preserving and increasing the true value of the medical uses of radiation.

Notes

1. The radiation due to natural sources has been estimated to cause between 70 and 170 millirem of irradiation to the gonads per annum in most parts of certain countries in which it has been studied, although higher values are found locally in some areas. See the reports "The hazards to man of nuclear and allied radiations" published by the United Kingdom Medical Research Council in June 1956, in which also the millirem is defined; and from information submitted to the Committee.
2. See the report of the International Commission on Radiological Protection (published in the *British Journal of Radiology*—Supp. 5, of December 1954—in the *Journal français d'électro-radiologie*—No. 10, of October 1955—etc., and revised in 1956.)

The death rate from pneumonia, influenza and tuberculosis has dropped about 90 per cent since 1900 in the United States, Health Information Foundation reports. HIF attributes the improvement to medical advances, particularly new drugs, and to better living conditions.

BULLETIN BOARD

COMING MEETINGS

North Carolina State Board of Medical Examiners, meeting to interview candidates for licensure by endorsement—Blowing Rock, July 26.

Duke University School of Medicine, Third Postgraduate Medical Seminar Cruise — embarking from New York, August 20.

North Carolina Heart Association, Annual Meeting—Barringer Hotel, Charlotte, September 14-15.

The Law-Science Institute—Hotel Morrison, Chicago, July 8-9.

Fourth International Poliomyelitis Congress — Geneva, Switzerland, July 8-12.

American Medical Association Public Relations Institute—Drake Hotel, Chicago, August 29-31.

Institute of Industrial Health, course in radiation for physicians and surgeons—University of Cincinnati, September 9-15.

American College of Gastroenterology, postgraduate course—The Somerset, Boston, October 24-26.

Association of Military Surgeons, Sixty-fourth Annual Meeting—Hotel Statler, Washington, D. C., October 28-30.

Pan Pacific Surgical Association,—Honolulu, Hawaii, November 14-22.

THIRD POSTGRADUATE MEDICAL SEMINAR CRUISE

The faculty for the third postgraduate medical seminar cruise sponsored by the Duke School of Medicine has been announced. The group includes Dr. William McNeal Nicholson, professor of medicine and director of postgraduate education; Dr. Deryl Hart, professor of surgery and chairman of the department; Dr. W. Banks Anderson, professor of ophthalmology; Dr. John E. Dees, professor of urology; Dr. Susan Coons Dees, associate professor of pediatrics and allergy, and Dr. Julian M. Ruffin, professor of medicine.

This will be one of the most ambitious cruises ever undertaken by any group in North Carolina. It will be made on board the M.S. Stockholm and will sail from New York August 20, 1957. News from the Allen Travel Service, Inc., 550 Fifth Avenue, New York, which is conducting the cruise, is to the effect that bookings already are heavy and that those wishing the best accommodations should send in their applications early.

The first stop will be at Dublin, August 28. Leaving the Irish Republic capital, the Stockholm will proceed to Glasgow, arriving there August 29. The next stop will be Bergen, Norway, then Oslo and Stockholm, the city for which the Stockholm was named. From the Swedish capital, the ship will head for Copenhagen. In addition to the main cruise, there will be extension trips to various European cities. Optional routes and facilities will be used for the return trip.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST COLLEGE

Construction is under way on a seven-story addition to the plant of The Bowman Gray School of Medicine of Wake Forest College. The contracts for the \$1,535,675 addition were let during the month of April, and work was begun in late May. The addition will provide expanded facilities for the library, animal quarters, research laboratories, conference rooms, and classrooms. This is the first major expansion since the present building was constructed in 1941.

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The new cobalt therapy division of the Department of Radiology in the Bowman Gray School of Medicine and the North Carolina Baptist Hospital is now in operation. A \$150,000 addition to the Baptist Hospital houses the \$35,000 telecobalt machine.

* * *

The Sigma Xi Club annual banquet and lecture were held on Monday evening, May 27. Major Paul W. Schafer spoke on his 1955 experiences in Russia, and his illustrated lecture was one of great interest. He and his wife were among the first Americans to be admitted to Moscow, and their visit extended for about 30 days, during which time they were shown many hospitals. Dr. Schafer, former chief of thoracic and cardiovascular surgery at Walter Reed Army Medical Center and active in medical research and surgical pathology, is presently executive director of the television division of the Walter Reed Army Medical Center.

* * *

Dr. Frederick C. Robbins, Nobel prize winner in 1954, in a recent three-day visit to the Bowman Gray School of Medicine, conducted lectures and rounds for the staff and students. Dr. Robbins, professor of pediatrics at Western Reserve University School of Medicine, in 1949 was one of three researchers at the Children's Medical Center in Boston who first grew polio virus in nonnervous primate tissue.

* * *

Dr. Alanson Hinman, assistant professor of pediatrics, has been granted a year's leave of absence in order to accept a clinical traineeship in neurology at the Neurological Institute, Columbia-Presbyterian Medical Center, New York.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

A volume of the *Yale Journal of Biology* has been published in memory of the late Dr. John P. Peters, father of Dr. Richard M. Peters of the faculty of the University of North Carolina School of Medicine.

The book was edited by Dr. Louis G. Welt, professor of medicine of the University of North

Carolina School of Medicine. Young Dr. Peters is an associate professor of surgery here.

The volume of the journal that was recently published in book form originally appeared in December.

The articles are written on subjects in the field in which Dr. Peters was interested. All of the articles were prepared by investigators who were trained in Dr. Peters' laboratory at New Haven.

* * *

Dr. Peter Paul Vaughn has been named assistant professor in the Department of Anatomy of the University of North Carolina School of Medicine.

Dr. Vaughn is a native of Altoona, Pennsylvania. He received his B.A. degree from Brooklyn College in 1950. His M.A. degree was awarded in 1952 and his Ph.D. degree was given in 1954, both by Harvard University.

He was a teaching fellow at Harvard 1950-1952 and an instructor at the University of North Carolina during 1954-1956. During the last academic year he was an assistant professor at the University of Kansas. He is the author of a number of articles that have been published in professional journals.

* * *

Dr. J. C. Andrews of the University of North Carolina School of Medicine will retire on July 1 after a 20-year teaching career here.

He is professor of biochemistry and nutrition. While most of his work has been with medical students, Dr. Andrews has taught hundreds of students at the University who were studying in other fields of science.

He joined the staff of the University of North Carolina in 1937, coming here from the University of Pennsylvania. He received his B.S. degree from the State University of Iowa and a Ph.D. degree from Columbia University.

He also is an honorary professor of the University of Guatemala, where he was sent to teach by the U. S. State Department in 1944. He is a member of the Guatemala Academy of Science.

Dr. Andrews estimates that since he has been at UNC he has taught 1,400 medical students, not including dental students and students in other courses of basic science.

Dr. Andrews and his wife will make their home in Conway, New Hampshire, following his retirement.

* * *

The first annual Adam T. Thorp III Memorial Lecture was given recently at the University of North Carolina School of Medicine by Dr. Robert E. Olson, professor of biochemistry and nutrition of the University of Pittsburgh Graduate School of Public Health. His subject was "Myocardial Metabolism in Health and Disease."

The lectures are being sponsored by the UNC Chapter of the Alpha Omega Alpha, honorary medical scholastic fraternity, as a memorial to

Adam T. "Skeets" Thorp III of Rocky Mount, who was killed in an automobile accident late last summer at the age of seven. Dr. Adam T. Thorpe, II, Skeets' father, was graduated from the UNC School of Medicine last June.

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Dr. Isaac M. Taylor, assistant professor of medicine, recently returned from "Operation Deep-freeze." The purpose of the operation was to establish an advance base at McMurdo Sound in the Antarctic, only a few hundred miles from the South Pole.

This was done in connection with the United States program for the International Geophysical Year 1957-1958, which has been set up in order that simultaneous observations may be made over the entire world in such sciences as astronomy, meteorology, oceanography, geology, and glaciology. Scientists from 55 nations are taking part in the program.

* * *

Two annual awards were announced recently at the University of North Carolina School of Medicine in connection with Student-Faculty Day.

The William deB. MacNider Award went to Edwin Lewers Stewart, a second-year medical student of Greenville, South Carolina.

This award was established by the second year class of 1950. It consists of public commendation of a sophomore medical student who is elected by his classmates because he possesses various intangible traits of good character which were typified by Dr. "Billy" MacNider. Dr. MacNider was teacher and physician at UNC for 51 years.

The Professor Award, established last year, went to Dr. A. Price Heusner. This award is voted each year by the members of the senior class of the School of Medicine to the professor who has contributed most to their education.

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Hoods were presented to 58 medical students graduating from the University of North Carolina School of Medicine at exercises held Monday, June 3 at 2:30 p.m. in Hill Hall. The regular graduating program was held in Kenan Stadium on the night of June 3. The hoods are symbolic of the doctorate.

Dr. W. Reece Berryhill, dean of the School of Medicine, presided at the program. The invocation was given by the Rev. Charles Hubbard of the University Methodist Church of Chapel Hill.

An address was given by Dr. Robert A. Ross, head of the Department of Obstetrics and Gynecology of the School of Medicine. Irl Tigert Sell, III, president of the senior class, of Norfolk, Virginia, also appeared on the program. The Hippocratic Oath and the Prayer of Maimonides were recited in unison by the graduating class.

The following honors and awards were announced by Dean Berryhill:

The Isaac H. Manning Award—Robert T. Whitlock, Class of 1957

This award, given to the outstanding member of the senior class, is based on scholarship, character, leadership, initiative and original investigative work.

The Roche Award — William Powell Cornell, Class of 1957

This award, sponsored by the Hoffman-La-Roche Company, is given to an "outstanding student" with the "qualities most desirable in a physician."

Elected to membership in Alpha Omega Alpha Honor Medical Society were Lyndon Ulysses Anthony, William Powell Cornell, James William Fresh, William Osborne Jones, and James Norfleet Slade, and Benson Reid Wilcox, all of the class of 1957, and William Robert Beckman, Carolyn Elizabeth Culbreth, and Charles Woodrow Phillips, Jr., members of the class of 1958.

* * *

Miss Christine Burton has been named to head the newly created Department of Occupational Therapy of the North Carolina Memorial Hospital of the University of North Carolina.

The new department operates under the direction of the Rehabilitation Committee of the Department of Preventive Medicine of the School of Medicine, which is headed by Dr. William P. Richardson. Its aim is to assist in improving and maintaining the overall physical condition of patients who need such services. This will be done in anticipation of the patient returning to his home and community.

Miss Burton came to Memorial Hospital from the Anderson Orthopedic Hospital Rehabilitation Center of Arlington, Virginia.

UNIVERSITY OF NORTH CAROLINA SCHOOL OF PUBLIC HEALTH

The University of North Carolina School of Public Health has announced a new rapid screening test for the detection of individuals infected with syphilis which promises to save physicians, public health departments, and patients thousands of dollars in money and time.

The test, developed by Dr. Warfield Garson and co-workers at the Department of Experimental Medicine of the School of Public Health, is now being tested on a mass basis at El Centro, California, in the screening of Mexican migrant laborers entering the United States.

Dr. Joseph Portnoy, principal immunoserologist of the UNC Venereal Disease Experimental Laboratory, who developed the test with Dr. Garson and Dr. C. A. Smith of the Communicable Disease Center of the Public Health Service in Atlanta, traveled to California last month to confer with public health officials operating the mass test.

While in the West Dr. Portnoy read a paper before the Laboratory Section of the Western Branch of the American Public Health Association meeting in Long Beach May 29—June 1 and conferred with public health laboratory personnel in California and Arizona.

NEWS NOTES FROM THE DUKE UNIVERSITY SCHOOL OF MEDICINE

Dr. John B. Hickam of the Duke University Medical School faculty has been honored for outstanding service to the Department of the Air Force.

He is one of three recipients of Exceptional Service Awards presented recently at Patrick Air Force Base, Florida, by Secretary of the Air Force James H. Douglas, Jr.

The award citation states that Dr. Hickam "distinguished himself by exceptionally meritorious service to the Department of the Air Force from 1952 through 1956, as a member and chairman of the Aeromedical Panel of the Scientific Advisory Board to the Chief of Staff, United States Air Force."

Dr. Hickam is associate professor of medicine in the Duke Medical School. He is a member of the American Society for Clinical Investigation, American Physiological Society, Association of American Physicians, and other professional organizations. He is president-elect of the North Carolina Heart Association. His writings have appeared in a number of medical journals.

* * *

Dr. Edward C. Horn, associate professor of zoology at Duke University, has been awarded a three-year research grant of \$30,000 by the National Cancer Institute, a subdivision of the U. S. Public Health Service.

The research to be conducted under the grant is the investigation of antisera, which kills a certain type of cancer cell. Long range results are expected to be the gaining of new knowledge of the fundamental difference between cancer cells and normal cells.

Earlier investigation leading up to the new grant was done by Dr. Horn under other U. S. Public Health Service grants with the work being conducted in the Biology Division of the Oak Ridge National Laboratory. Dr. Horn, a consultant to the laboratory, did most of the work during summers and while on a sabbatical leave from Duke.

* * *

Some 40 student nurses, who exchanged their blue and white uniforms for academic robes at Duke University's one hundred fifth commencement recently, represent an important "first" in the Duke School of Nursing. Candidates for the B.S. in Nursing degree, they are the first students to complete all four years of a new nursing degree program established at Duke in 1953.

This year also marks the discontinuation of the long-standing three-year program leading to the Diploma in Nursing, Dean Ann M. Jacobansky of the School of Nursing said. She pointed out that this program will no longer be offered because the majority of Nursing School applicants now express preference for the four-year degree program.

This program is designed to integrate general

and professional education by requiring undergraduate liberal arts courses as well as nursing studies. The diploma program, on the other hand, has stressed development of skills, knowledge, and attitudes needed for bedside nursing in hospitals and homes.

Since the new program was initiated in 1953, enrollment in the School of Nursing has increased from 130 to some 300. This fall, 80 students from North Carolina, a number of other states and two foreign countries will be accepted as freshmen.

NORTH CAROLINA HEART ASSOCIATION

The Board of Directors of the North Carolina Heart Association meeting in High Point last month heard State Campaign Chairman C. R. (Dick) Andrews of Greensboro report that \$280,000 had been raised in the Heart Fund Drive held last February. With donations still coming in from contributors who were missed by the volunteer collectors, the indications are that around \$285,000 will be realized by the end of the fiscal year, June 30, Mr. Andrews said.

This is the largest amount in Heart Fund History and the Board, in appreciation for his leadership, presented Mr. Andrews with a Meritorious Service award.

Another award went to Dr. Edwin P. Hiatt of the University of North Carolina, for Distinguished Service in the fields of research, teaching, and volunteer work for the North Carolina and Durham-Orange Heart Associations. Dr. Hiatt, who served two years as treasurer and three years as a director of the State Association, is this year's president of the Durham-Orange Chapter. He is leaving the University for a research post with the Air Force at Wright-Patterson Field near Dayton, Ohio.

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The annual meeting of the North Carolina Heart Association will be held September 14 and 15 in Charlotte, at the Barringer Hotel, according to Dr. John B. Hickam of Duke, chairman of the Arrangements Committee, and president-elect of the state Heart Association.

Featured at the scientific sessions Saturday afternoon, September 14, will be Dr. Charles Kossman of New York University, specialist in electrocardiology; and a clinicopathologic conference led by Dr. Eugene A. Stead, Jr., of Duke and Dr. Paul Kimmelstiel of Charlotte Memorial Hospital.

The speaker at the banquet the same evening will be Dr. Eugene B. Ferris, Jr. of New York, new Medical Director of the American Heart Association.

All North Carolina physicians are invited to attend these sessions.

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Some common misconceptions about the danger of high blood pressure are cleared up in a booklet which was issued recently by the American Heart Association and is now available through local chapters of the North Carolina Heart Association, or its state office in Chapel Hill. The pamphlet also reviews modern methods of treating hypertension and states that the outlook for high blood pressure patients is now more favorable than ever before.

The author of "High Blood Pressure" is Dr. Edgar V. Allen, senior consultant in medicine at the Mayo Clinic in Rochester, Minnesota and president of the American Heart Association.

Single copies are available without charge from local Heart chapters or from The North Carolina Heart Association, Miller Hall, Chapel Hill, North Carolina.

THE LAW-SCIENCE INSTITUTE

Dr. Hubert Winston Smith, Director of the Law-Science Institute, The University of Texas, Austin, Texas, has announced plans for the "First American Congress of Legal Medicine and Law-Science Problems," which will be held at the Hotel Morrison, Chicago, July 8-20, for the benefit of lawyers and physicians concerned with personal injury problems.

The Congress will feature 165 distinguished lecturers, drawn from the ranks of top medical specialists and trial lawyers. Each week the registrant may take a complete basic course or an advanced course without substantial duplication of instruction between the two weeks. In the basic course systematic consideration is given to the structure and function of the body, to the main organ systems, to the relation of accidents to injury and disease, and to the multitudinous problems of preparation and trial of personal injury cases. Other sections will be devoted to the science of proof in criminal litigation, showing the aids and limitations of scientific crime detection evidence, forensic pathology and toxicology, forensic psychiatry, and other medical specialties. In addition, there will be many sessions on "Legal Problems in the Practice of Medicine."

NEWS NOTES FROM THE AMERICAN MEDICAL ASSOCIATION

Dr. David B. Allman—New A.M.A. President

In taking the oath of office as one hundred eleventh president of the American Medical Association June 4 in New York, Dr. David Bacharach Allman dedicated himself to the task of preserving the best in the personality of medicine and in the personality of America. The 65 year old Atlantic City surgeon emphasized the fact that physicians today minister "not only to the human body and its ills but also to human hearts, minds and emotions."

Dr. Allman has been a prominent figure in the

activities of the American Medical Association for many years. In 1951 he was elected to the A.M.A. Board of Trustees. In addition, he served as a member and chairman of the A.M.A. Committee on Legislation.

Dr. Allman formally announced his retirement from medical practice in 1950. His 35 years of practice included 30 years as surgical director and chief surgeon of Atlantic City Hospital.

A.M.A. Produces New Film for the Public

"What doctors do as a group is sometimes more important than what they do individually." These are the words of news commentator John Cameron Swazy in setting the stage in a new A.M.A. film for a series of incidents documenting how organized medicine serves Americans everywhere. Swazy is narrator for this 30-minute color film scheduled for release to medical societies for local showings September 1. The film will be premiered August 28 at A.M.A.'s Public Relations Institute in Chicago.

A.M.A. Plans PR Big Game Hunt

The American Medical Association's 1957 Public Relations Institute will be held at Chicago's Drake Hotel, August 28-29. Wednesday morning's session will seek solutions to three problems of medicine and publicity: (1) problems of science writers in developing stories of national significance; (2) problems of the working press in covering local medical news, and (3) ethical considerations of distinguishing between advertising and legitimate medical news.

A.M.A.'s new film for the public—"Whitehall 4-1500"—will be premiered during Wednesday's luncheon, and the "Mechanical Quackery" slide-film also will be shown. In the afternoon, state, and county representatives will split up into four groups—according to size of society—to discuss mutual public relations problems.

Thursday morning's problem will include a panel discussion on the present status of grievance committees and how they can work more efficiently. Other discussion topics will be selected later. The one-and-a-half day meeting will wind up with a luncheon featuring an outstanding guest speaker to be announced later.

Plenty of time will be allotted throughout the meeting for questions and answers. State and county medical society executives, public relations personnel, and public relations committee chairmen are especially urged to attend this conference.

Doctors As Diplomats

American doctors around the world will be the theme of a full-hour color "March of Medicine" television film to be presented this fall by Smith, Kline & French Laboratories with the cooperation of the American Medical Association. The program will be built around the activities of American doctors throughout the world who, in their devotion to their profession, are good-will ambassadors for the United States.

A.M.A. Publishes Current Health Insurance Data

Latest information on voluntary prepayment medical benefit plans is being compiled by the A.M.A. Council on Medical Service. Both the tenth revision of "Voluntary Prepayment Medical Benefit Plans" and the supplementary "Charts and Graphs" will be available about July 1. The former summarizes information on the benefits, organizational structure, premiums, enrollment, and so forth, of more than 100 plans designed to provide assistance in financing health care. The latter pamphlet contains composite statistical data showing aggregate claims experiences, administrative costs, and enrollment figures as well as comparisons with similar figures published by other sources. For the most part, enrollment figures are as of December 31, 1956, while the statistical data pertain to operations and experiences for the 1956 calendar year.

Single copies will be available to physicians and medical societies, without charge, from the Council.

A.M.A. Television Programs Win Awards

Medicine is making a name for itself in the world of television. Recently, three A.M.A.-sponsored programs walked off with national and local awards in competition with commercially-sponsored programs. At the fourth American Film Assembly sponsored by the Film Council of America, A.M.A.'s newest TV film "Even for One" received the Golden Reel Award in the institutional promotion category. "Monganga"—a filmed report on a medical missionary which was produced by Smith, Kline & French Laboratories in cooperation with A.M.A.—received the Silver Reel Award at the same show.

Locally, A.M.A.'s second series of 26 programs for "Baby Time" received the Chicago Federated Advertising Clubs top award for "outstanding achievement in advertising by Chicago talent." The A.M.A.'s Bureau of Health Education announces that 13 selected films from this series are being made available for a period of one year, without charge, to medical societies for placement on local public service time.

Mental Health Films Available from A.M.A.

Three documentary mental health films recently have been added to the A.M.A. Film Library. (1) "We, The Mentally Ill"—a drama about mental illness based on the life of Dorothea Lynde Dix, mental health crusader, and summarizing existing conditions in mental institutions and dramatic new medicines revolutionizing treatment; (2) "Alcoholism: The Revolving Door"—demonstrating early treatment of acute alcoholism with both psychotherapy and new drug therapy; (3) "Man in Shadow"—dramatic presentation of man's struggle to overcome mental illness, expertly combined with documentary film taken at Cleveland State Hospital where patients are seen at their daily routines.

WORLD REHABILITATION FUND, INC.

Formation of a new voluntary organization to stimulate international understanding through sponsorship of international projects in rehabilitation of the physically handicapped was announced recently. The new organization is the World Rehabilitation Fund, Inc. of which Dr. Howard A. Rusk is the president.

Dr. Rusk also announced that the Fund's first international scholarship to bring physicians and other rehabilitation workers to the United States for advanced study had been created with a grant to the Fund from the American President Lines. Under the scholarship, known as the American President Lines Fellowship, a physician from the Philippines will be given a minimum of one year's advanced training in physical medicine and rehabilitation at the Institute of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center.

The objectives of the new organization, Dr. Rusk said, are to (a) speed independent self-assistance in under-developed areas; (b) to make the contribution of the United States to the welfare of the disabled throughout the world better understood, and (c) to develop international understanding and friendship.

There will be no general public fund raising appeal in behalf of the Fund, Dr. Rusk explained. Financial support will come from corporations, foundations, and individuals in the United States, he said, who share the Fund's view that "international rehabilitation projects express the belief of the people, industry and government of the United States that man's mission on earth is to heal and not to hurt, to build and not to destroy. We want the people of the world to see tangible evidence through work with the physically handicapped that American industry is interested in the welfare, not only of the workers who make its products and services, but those throughout the world who consume them."

The Fund, which has tax-exempt status, has its offices at 400 East 34th Street, New York 16, New York.

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The World Rehabilitation Fund has announced a \$5,000 grant from Smith, Kline & French Laboratories to permit a physician from Great Britain to come to the United States for a minimum of one year's postgraduate training in rehabilitation of the physically handicapped.

Disclosure of the grant was made simultaneously in Britain at a dinner in London of the Royal College of Surgeons at which Francis Boyer, President of Smith, Kline & French Laboratories, was a guest.

BRAIN RESEARCH FOUNDATION

A new book on blood tests in mental illness was published on May 31 by the Brain Research Foundation, according to an announcement by Dr. Ladislav J. Meduna, president of the Foundation and professor of psychiatry at the University of Illinois College of Medicine, Chicago.

Dr. Stig Akerfeldt, young biochemist from the Nobel Institute, Stockholm, Sweden, is the leading contributor to the new volume, which includes papers and discussions presented at the annual scientific conference of the Brain Research Foundation.

Dr. Akerfeldt's six-minute blood test for schizophrenia, the most prevalent mental illness, now is under investigation in dozens of laboratories throughout the world, Dr. Meduna said. Dr. Akerfeldt was brought to the United States earlier this year by the Brain Research Foundation to present his important new discovery to American scientists. The details of Dr. Akerfeldt's work are in the new book.

"The greater significance of Akerfeldt's work and that of others who are following up on it," Dr. Meduna continued, "is the indication that the majority of mental illnesses are definitely associated with detectable chemical changes in the brain. If these chemical upsets can be identified, we stand a good chance of being able to cure and possibly prevent mental illness by chemical means."

Dr. Leo Abood, of the division of psychiatry of the University of Illinois College of Medicine, is one of the American scientists who has confirmed Dr. Akerfeldt's original work. His findings are also included in the new book, along with discussion and comments from 16 leading biochemists and psychiatrists from the United States and Europe.

Established in 1953, the Brain Research Foundation is a nationwide, nonprofit, voluntary organization of doctors and laymen interested in meeting the challenge of brain disorders. Offices are at 600 South Michigan Avenue, Chicago 5, Illinois.

CARLSON SCHOOL FOR CEREBRAL PALSY ANNOUNCES

Two informal Summer Sessions for ambulatory Cerebral Palsy Patients.

First session: June 15 - August 1; second session: August 1 - September 15.

Located on ocean; swimming pool; supervised therapy.

For information write to Carlson School, Pompano Beach, Florida

GROUP FOR THE ADVANCEMENT OF PSYCHIATRY

To aid in the smooth changeover to desegregation in the nation's schools, a group of more than 250 psychiatrists and social scientists have just released their pooled observations and findings on the psychological aspects of desegregation. Their recommendations, addressed in the main to public officials, school administrators, teachers, and parent-teacher organizations, among others, are designed to assist in working out the knotty inter-racial problems affecting desegregation.

The report, "Psychiatric Aspects of School Desegregation," prepared and published by the Group for the Advancement of Psychiatry, is one of the most thorough scientific studies of its kind to be made public since the famous U. S. Supreme Court decision on this subject was announced. Among many other conclusions it documents in clear and firm language, the court's contention that segregation in fact does impair the psychological growth of children.

PAN-PACIFIC SURGICAL ASSOCIATION

The Seventh Congress of the Pan-Pacific Surgical Association will be held in Honolulu, Hawaii, November 14-22. All members of the profession are cordially invited to attend and are urged to make arrangements as soon as possible if they wish to be assured of adequate facilities.

An outstanding scientific program by leading surgeons with sessions in all divisions of surgery and related fields promises to be of interest to all doctors.

Further information and brochures may be obtained by writing to Dr. F. J. Pinkerton, Director General of the Pan-Pacific Surgical Association, Room 230, Young Building, Honolulu, Hawaii.

PAN AMERICAN SANITARY BUREAU World Health Assembly

The World Health Assembly has elected six member states to designate persons to serve on the World Health Organization's Executive Board. The following were chosen: United States, Liberia, Australia, Federal Republic of Germany, Egypt and Afghanistan.

The 12 continuing members of the 18-member executive board are: Argentina, Canada, Ecuador, Finland, India, Italy, Mexico, Pakistan, the Philippines, Portugal, Syria, and the United Kingdom.

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Dr. M. G. Candau, Director-General of the World Health Organization, has pointed out that the WHO had collaborated during 1956 in some 700 projects in 120 countries and territories and had maintained close and fruitful collaboration with nearly 1,800 scientific institutions, particularly medical research laboratories all over the world. This statement was made in his presentation of

the annual report on the work of the Organization during the past year.

Dr. Leroy E. Burney, Surgeon General, United States Public Health Service, who heads the U. S. delegation to the X Assembly, said that President Eisenhower had pointed to the World Health Organization as one of the highly successful Specialized Agencies of the United Nations, and an example of how international cooperation had benefited mankind.

* * *

Dr. Paul F. Russell of the Rockefeller Foundation has been awarded the Darling Foundation Medal and a prize of 1,000 Swiss francs "for outstanding achievements in the control of malaria."

The award was made in a plenary session of the World Health Assembly by its President, Dr. Sabih Hassan Al-Wahbi of Iraq, who said that this fifth award of the prize was made to one renowned in the field of anti-malaria work, trained for the task by Dr. S. T. Darling, who was killed by accident in 1925 during a study mission of the League of Nations Malaria Commission, whose memory the prize perpetuates.

HEALTH INSURANCE COUNCIL

The insurance business must strengthen its relationship with the medical and hospital professions in order to make voluntary health insurance coverage more effective and better serve the public's needs, Howard A. Moreen, chairman of the Health Insurance Council, and vice president of the Aetna Life Insurance Company, Hartford, Connecticut, told the tenth annual meeting of the Council in Chicago, May 16.

The Health Insurance Council—comprising eight insurance associates whose members account for 90 per cent of the health policies written by insurance companies—serves as the central source of information for providing technical and practical assistance to persons in the health care field on the development and use of accident and health insurance benefits. There are over 66 million people in the United States protected under some form of voluntary health insurance through insurance company programs today.

VETERANS ADMINISTRATION

Discovery of a substance in the human blood stream believed to be the actual cause of high blood pressure and the search for a remedy were announced by Veterans Administration recently.

The chemical substance, called hypertensin, was isolated by a research group at the VA hospital in Cleveland, Ohio.

Now the VA researchers have started the quest for a chemical agent that will counteract hypertensin and thus check the disease which is man's greatest killer.

* * *

A colony of 40 rabbits at the Veterans Administration hospital in Dallas, Texas., may help answer the question of whether cigarettes can cause lung cancer.

Dr. Robert H. Holland, who began the research project about a year ago, said the rabbits are being subjected to conditions duplicating human smoking.

After death, the lungs and respiratory tracts of the rabbits are examined and the findings go into case files.

UNITED STATES ATOMIC ENERGY COMMISSION

Award of 55 unclassified life science research contracts in the fields of medicine, biology, biophysics, radiation instrumentation, and in special training was announced by the U. S. Atomic Energy Commission. The contracts were awarded to universities and private institutions as part of the AEC's continuing policy of assisting and fostering research and development in fields related to atomic energy as specified in the Atomic Energy Act of 1954, and as amended in 1956.

Among the institutions receiving awards for new projects or renewals of previous contracts was the University of North Carolina.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Dr. Richard B. Holt, a senior career medical officer of the Public Health Service, has been appointed Chief Medical Officer of the United States Coast Guard effective July 1, 1957. Dr. Leroy E. Burney, Surgeon General of the Public Health Service, announced recently.

Since 1954 Dr. Holt has been Hospital and Medical Facilities Director for Region III, U. S. Department of Health, Education, and Welfare, with headquarters in Charlottesville, Virginia. As Chief Medical Officer of the Coast Guard, he will hold the rank of Assistant Surgeon General, comparable with that of Rear Admiral (upper half).

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BLUE CROSS COMMISSION

Blue Cross members in 1956 received more than one billion dollars worth of hospital care—the largest amount yet paid in a single year in the history of hospital prepayment. This record was disclosed recently by the Blue Cross Commission in releasing the publication, "Blue Cross Report to The Nation 1957."

The Blue Cross report indicates that 93 cents of each subscriber's dollar was returned in the form of hospital service benefits. Some 9,000,000 Blue Cross members, admitted to hospitals last year, received more than 53,000,000 patient days of care through Blue Cross.

Along with greater benefits, Blue Cross made extensive progress in spreading hospital prepayment to more people, closing the year 1956 with nearly 54,000,000 members. This means that almost one-third of the population is now protected by Blue Cross from financial disability during hospitalized illness.

Colace Available in Syrup Form

Colace, Mead Johnson's new dioctyl sodium sulfosuccinate stool-softener, now is available in syrup form, broadening the Colace family to four products in three different dosage forms for easy administration to patients of all ages.

The new orange-mint-flavored syrup supplies 20 mg. of dioctyl sodium sulfosuccinate per teaspoonful. Its pleasant flavor has been developed especially to appeal to children, according to Company officials.

With the latest addition, the Mead Johnson Colace family now consists of the original 50 mg. capsules, a 1 per cent aqueous drop dosage solution, the syrup, and another new Colace product which has been introduced recently—100 mg. capsules for management of difficult cases.

Classified Advertisements

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BOOK REVIEWS

Compleat Pediatrician. Ed. 7. By Wilburt C. Davison, M.D., 257 pages. Price, \$4.25. Durham, North Carolina: Duke University Press, 1957.

In the seventh edition of his "Compleat Pediatrician" Dean Wilburt C. Davison, professor of pediatrics and dean of Duke University Medical School, has again accomplished the impossible. With the able assistance of his daughter, Dr. Jeana Davison Levinthal as co-author, he has packed vastly more than any pediatrician or general practitioner could ever need to know between the covers of an ordinary sized book, and at the same time has made it intensely interesting reading.

The hosts of readers of the six previous editions of this required reading for pediatricians to carry in their medical bags, have long been accustomed to turn quickly and readily to the simple clear description of any clinical entity on which they want up-to-date information. But even they will be surprised to find the staggering amount of new information the present edition contains, just as readily obtainable as the material in the earlier volumes.

The additions rendered necessary in order to keep up with the progress of the past few years in antibiotic, antihistaminic, anticonvulsant, electrolyte, and steroid therapy have taken the place of the outmoded pediatric "facts" that have become obsolete. The author's simple, practical handling of this whole subject is easily the most usable presentation this reviewer has yet seen. This has made it possible to keep the book within reasonable bounds. Every rare pediatric disease is described adequately; but the emphasis throughout the book is on the most commonly encountered diseases.

If ever an encyclopedia of important facts were made available to a specialist in any field of medicine, Dean Davison has created it in his "Compleat Pediatrician," the handbook for pediatrician and general practitioner.

A Woman Doctor Looks at Love and Life. By Marion Hilliard, M.D. 190 pages. Price, \$2.95. Garden City, New York: Doubleday & Company, Inc., 1957.

For a woman who has never been married, Dr. Hilliard has an amazing insight into married life—not only the woman's but the man's problems, joys, and sorrows. The book is a series of articles written for a woman's magazine, with the help of a professional writer—who happened to be one of the author's patients.

Dr. Hilliard's charming frankness about herself makes the book unusually interesting and convincing. For example, she tells of her rejection by her fiancé because, after having lost sleep for the four previous consecutive nights, she went to sleep in

the car while he was driving her back home. Soon afterward he married another woman, and she experienced her greatest heartache when she had to deliver their first baby "that might have been mine." She also draws on her own experience when she describes the menopause—classifying its best known vasomotor phenomenon according to severity as a "straight flush" or a "royal flush."

The book deals frankly but decently with virtually all the problems of married life: sex relations, pregnancy, the menopause, in-laws, adolescent children, and housework. Most of the chapters would appeal chiefly to women, but one of the best is "An Open Letter to Husbands." It could be read with profit by almost every man, from adolescence to full maturity.

Another good chapter minimizes the four fears that prey on women. These are menstruation, pregnancy, cancer, and old age. Separate chapters are devoted to pregnancy and to old age. The menopause is called "woman's greatest blessing," and good reasons are given for the designation in spite of the vasomotor manifestations that go with it.

The book can be highly recommended as one of the most readable and sensible ones of its kind that have yet appeared.

For Teen-Agers Only. By Frank Howard Richardson, M.D. 112 pages. Price, \$2.95. Atlanta, Georgia: Tupper & Love, Inc., 1957.

Dr. Richardson, in his delightful way, has written a quite complete discussion of the pros and cons of marriage, for young boys and girls 13 to 18 years of age. His suggestions are concrete and he describes realistically the **practical** side of teenager's problems. He stresses the fact that he is not advising them **not** to marry, but directs them to make that decision themselves. The absence of "lecturing" and "moralizing" tremendously enhances the book's appeal.

The small size of the volume and its conversational style will appeal to youth. It is highly recommended.

Digestive System. The Ciba Collection of Medical Illustrations: Liver; Biliary Tract and Pancreas. Part III of Volume 3. By Frank H. Netter, M.D. Edited by Ernst Oppenheimer, M.D. 165 pages, including 133 full color plates with descriptive text. Price, \$10.50. Publications Department Ciba Pharmaceutical Products, Inc., Summit, New Jersey, 1957.

The enthusiastic reception of the color illustration of normal and pathologic anatomy prepared by Dr. Frank Netter and distributed by Ciba has led to their collection and publication in volumes devoted to the separate systems.

Publication of Parts I and II of the Digestive System covering the upper and lower digestive tract has been delayed to permit earlier publication

of Part III because of the increased interest in liver, biliary tract and pancreatic disease.

There are five sections covering the normal anatomy of the liver, biliary tract, and pancreas; the physiology and pathophysiology including hepatic and pancreatic tests, followed by sections containing illustrations and texts dealing with diseases of the liver, gallbladder and bile duct, and pancreas.

The contributors and consultants include Drs. Oscar Bodansky, Eugene Clifton, Donald Kozoll, Hans Popper, and Victor Sborov, outstanding investigators and contributors to our understanding of the pathologic physiology of these aspects of digestive disease. The illustrations are graphic and beautifully done. The text is concise and most complete. Controversial material is designated as such, without detailed and pointless discussion.

There is a subject index and bibliography for each section, with general references and numerous cross references.

This book is in keeping with the previous high standards of Ciba Medical Publications. The importance of the material covered and the skillful blending of outstanding illustrations with basic and clinical material will make this volume of interest to students and practitioners, and a valuable reference for all individuals interested in the accessory digestive organ systems.

The Month in Washington

Again the Jenkins-Keogh plan is up for consideration in Congress. While there is no assurance it will be passed, or even get out of the House Ways and Means Committee, many sponsors of the legislation this year are united in one organization and are making themselves felt on Capitol Hill.

Briefly, this bill would allow any self-employed person to put a limited portion of his income into a retirement fund without paying income taxes on the money. Taxes would be paid when the money was received as pension or retirement.

Sponsors of the Jenkins-Keogh plan point out that it very definitely is not legislation to give a special tax advantage to one group of people. For one thing, every self-employed person would be eligible, from farmers to doctors and from opera singers to architects. For another, corporations since 1942 have been allowed to put money into retirement funds for their employees without payment of federal taxes

From the Washington Office of the American Medical Association.

on the money; the self-employed merely want the same consideration.

At various times the American Medical Association has led in the campaign for enactment of legislation of this type. Two years ago the House Ways and Means Committee voted to report it out, as part of a broader tax bill, but the committee never actually got around to sending the combined bill to the House floor.

Now the lead is being taken by a newly-formed American Thrift Assembly, or officially the American Thrift Assembly for Ten Million Self-Employed. In addition to the A.M.A., the new group has the support of American Dental Association, American Bar Association, and a score or more of other national organizations that represent the self-employed.

After the Congressional session was well under way, the ATA surveyed the political-legislative climate and found it favorable for Jenkins-Keogh. Then in early May the assembly asked its constituent associations to go to work. They were urged to have all members contact the House Ways and Means Committee with requests that the Jenkins-Keogh bill be reported favorably to the House floor. Assembly strategists are confident that if the committee hears from enough of the people who would be affected, it will approve the bill before adjournment. Then, if there isn't time for House action this year, that step can come next year.

Economy has been the main obstacle in the path of Jenkins-Keogh—the fear on the part of the Treasury Department that passage of the bill would mean a serious loss of

income tax revenue. However, the Treasury has never denied that the bill is justified to equalize tax status for the self-employed in relation to corporation employees.

Answering the economy argument, the Assembly makes two points:

First, the set aside funds, invested in the country's economy, would stimulate business and develop far more in new income tax payments than it would cost.

Second, because the self-employed who retain their health rarely retire at any arbitrary age, many of them in the years past 65 would remain in a tax bracket not significantly lower than when they paid into the retirement fund.

* * *

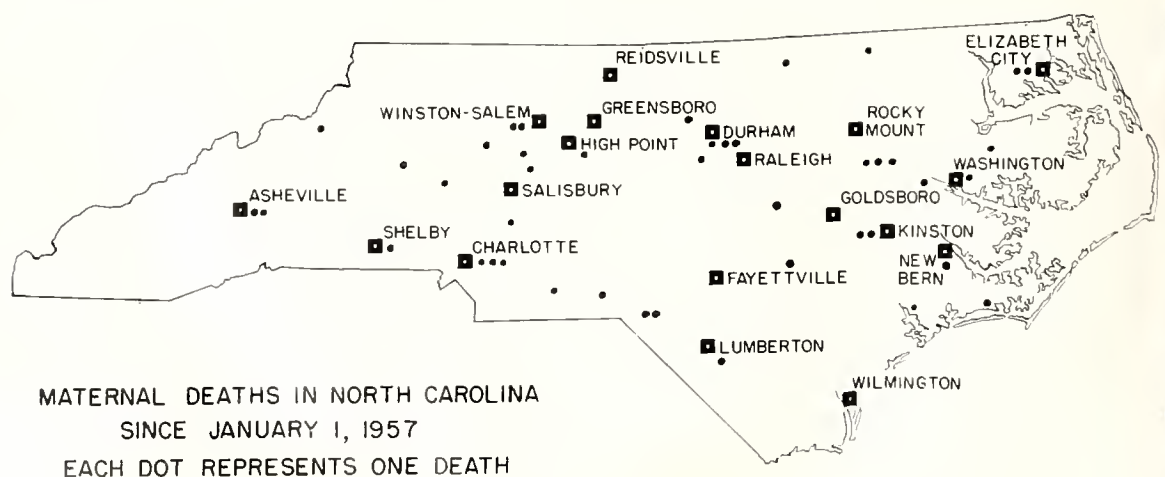
When Congress votes the money, the new home of the National Library of Medicine will be constructed at Bethesda, Maryland, near the National Institutes of Health and the Navy Medical Center. This site was selected by the board of regents at its second meeting.

* * *

At the request of Speaker Rayburn, the House Interstate and Foreign Commerce Committee has set up a special subcommittee with authority to find out if government agencies are expanding their operations beyond limits intended by Congress. The subcommittee expects to continue its investigations between the sessions of Congress.

* * *

Because of his achievements in the advance of mental health, Dr. William C. Menninger has been selected by the U. S. Chamber of Commerce as "one of the great living Americans."



2.1
NORTH CAROLINA

Medical Journal



Vol. 18 No. 7
July, 1957

IN THIS ISSUE:

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INTRAEPIHELIAL CARCINOMA OF THE CERVIX UTERI
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JULY, 1957

NUMBER 7

Present Concepts in the Diagnosis and Management of Intraepithelial (Stage O) Carcinoma of the Cervix Uteri

ROY T. PARKER, M.D.
W. KENNETH CUYLER, Ph.D.
LOUISE A. KAUFMANN, B.A.
CHARLES H. PEETE, JR., M.D.
and
BAYARD CARTER, M.D.

DURHAM

The patient is usually a young woman. The disease has no symptoms. The lesion has no characteristic appearance. The employment of genital cytology is essential for detection. The institution of the proper steps in diagnosis and treatment should yield a salvage rate of approximately 100 per cent. This is why clinicians must become informed about the problems of intraepithelial, stage O, cancer of the cervix.

Carcinoma *in situ* (stage O) of the cervix has been recognized for about 50 years. Stoddard⁽¹⁾, in his classic contribution to the subject, credits Schauenstein⁽²⁾ with the earliest description of this lesion in the foreign literature (1908), and Rubin⁽³⁾ with the earliest accurate description in the American literature (1910). Rubin⁽³⁾ proposed that cytologic epithelial carcinoma is a sufficient criterion of malignancy, despite the absence of invasion of the stroma. During the next 25 years numerous articles in the German and American literature described the histologic appearance of the lesion and debated the question, "Is it or is it not malignant?" These discussions were carried on primarily by the anatomist, the pathologist, and the pure scientist, since the discovery of intraepithelial cervical cancer was a more or less accidental finding in the microscopy laboratory.

The study of desquamated cells and bits

of tissue in sputum, and cells from the vagina, urinary tract and other body cavities, in an effort to diagnose cancer, began nearly a century ago. In 1928 Papanicolaou⁽⁴⁾ published his first article on the presence of uterine cancer cells in vaginal smears. The significance of this work was not fully recognized until 1943, when Papanicolaou and Traut⁽⁵⁾ published their monograph on the subject.

Today the value of exfoliative cytology for cancer detection is recognized by virtually all physicians. The atypical and anaplastic cervical epithelium can be identified in smears obtained by a simple office procedure. These techniques provide an early signal of an otherwise usually unrecognizable stage O cancer lesion. Intraepithelial carcinoma of the cervix is no longer a curiosity in the pathologic laboratory. It has become a frequent and real problem to the medical practitioner.

The purpose of this paper is to present a simple, brief discussion of our clinical approach to the diagnosis and management of intraepithelial cancer of the cervix, based on our experience during the past ten years.

Clinical Material

From January 1, 1947, through December 31, 1956, 229,889 Papanicolaou genital smears from 58,324 patients were studied.

In 50,324 gynecologic patients, 294 intraepithelial cancers were diagnosed by

From the Department of Obstetrics and Gynecology, Duke University School of Medicine, Durham.

Table 1

Intraepithelial (Stage O) And Invasive Squamous Cell Carcinomas in 50,324* Gynecologic Patients (1947-1956)

	Non-invasive Intraepithelial Ca. of Cervix	Invasive Squamous Cell Ca. of Cervix
No. Patients		
White	229	534
Negro	65	496
Total	294	1,030
Incidence	0.58%	2.04%
Average Age (Years)		
White	41.6	49.5
Negro	37.0	48.8
Combined	40.6	49.2

*Approximately.

Table 2

Intraepithelial (Stage O) And Invasive Squamous Cell Carcinomas in 8,000* Obstetric Patients (1947-1956)

	Non-invasive Intraepithelial Ca. of Cervix	Invasive Squamous Cell Ca. of Cervix
No. Patients		
White	25	9
Negro	19	14
Total	44	23
Incidence	0.55%	0.28%
Average Age (Years)		
White	31.2	31.3
Negro	35.5	29.0
Combined	31.4	29.9

*Approximately.

pathologic studies, for an incidence of 0.58 per cent, and 1,030 invasive squamous cell cancers, for an incidence of 2.04 per cent (see table 1).

In 8,000 obstetric patients, 44 intraepithelial cancers were diagnosed by pathologic studies, for an incidence of 0.55 per cent, and 23 invasive cancers, for an incidence of 0.28 per cent (see table 2).

We realize that the high occurrence of invasive cervical carcinoma in our clinic is due in part to the referral for treatment of patients who had been diagnosed previously, but it is not felt that the incidence of intraepithelial cancer is influenced by specific patient referral. These were unselected patients from our daily clinic and hospital practice. The obstetric patients are largely local people, and the incidence is not altered by a referred practice.

The incidence of 0.57 per cent intraepithelial cancer in our clinics is closely comparable to the findings of others⁽⁶⁾.

Smear Preparation and Cytologic Classification

The preparation of smears of first quality is essential for adequate cytologic study. Several methods of making a smear, if properly carried out, result in good preparations. Aspiration is the preferred method of obtaining material for study. Two smears are obtained routinely from obstetric as well as gynecologic patients. One smear is made from the contents of the vaginal pool, a second from material aspirated from the external os and the cervical canal. A third smear may be made following uterine sounding. In our opinion, material is collected deeper in the cervical canal by aspiration than by other methods, and post-sounding smears often

contain evidence of a lesion which is not indicated in the routine vaginal and cervical smear preparations.

The epithelial elements in smear preparations are classified under numerous categories to facilitate segregation of various degrees of cellular atypism⁽⁷⁾. This classification has been extremely helpful in distinguishing between intraepithelial carcinoma of the cervix and less marked neoplastic lesions with anaplastic potentialities on the one hand, and between intraepithelial carcinoma and invasive carcinoma on the other hand.

The inferior quality of the smear as often as faulty judgment is responsible for failure to interpret intraepithelial carcinoma from smears which contain, or are thought to contain, less marked atypiae than those associated with *in situ* cancer. The intraepithelial lesion may arise as a well differentiated tumor⁽⁸⁾. Therefore, when tumor cell-types commonly associated with invasive squamous cell carcinoma predominate, the cytologic interpretation is invasive cancer rather than intraepithelial carcinoma. When cell-types which indicate both carcinoma *in situ* and invasive cancer are present, the preponderance of one over the other is responsible for an interpretation of one lesion and the probable existence of the other (see table 3 and fig. 1).

Which patients should have genital cytologic smears? The typical patient with stage O cervical cancer does not have definite symptoms suggesting genital malignancy. She is seen for a "routine check-up," or for reasons unrelated to the genital system, or for benign gynecologic disease. In our opinion, all women should have genital cytologic smears at least once a year,

Table 3
Analysis of Smear Type Distribution In 338 Patients With Intraepithelial Carcinoma (1947-1956)

Type	No. Patients	Per Cent
No Interpretation	3	0.9
I Essentially normal	0	0.0
II Abnormal, benign	12	3.5
IIA Mild atypicalities	7	2.1
II+ Marked atypicalities	32	9.5
III ?Intraepithelial carcinoma	48	14.2
III Intraepithelial carcinoma	68	20.1
III Intraepithelial carcinoma, ? invasion	52	15.4
III ? Malignancy	34	10.1
IV Squamous cell carcinoma, few cells	5	1.5
V Squamous cell carcinoma ? Intraep. carcinoma	30	8.9
V Squamous cell carcinoma, many cells	47	13.9
Total	338	100.0

and more often when there is any index of suspicion. This should include the obstetric as well as the gynecologic patient, the healthy as well as the sick, and the younger as well as the older woman.

In the 338 patients with intraepithelial carcinoma, 19.6 per cent were below the age of 30 years and 56.5 per cent were below the age of 40. During the same 10-year period, the mean age of the 338 patients with stage O cancer was 39.4 years, whereas the mean age for 1,053 patients with invasive cancer of the cervix was 48.7 years (see table 4).

The diagnosis of intraepithelial, stage O carcinoma of the cervix is made by a microscope. The gross appearance of the lesion has no characteristic features. The colposcope magnifies the visible surface epithelium sufficiently for sites of abnormal growth to be detected. It is helpful in indicating the site for biopsy. Colposcopy, in our opinion, may complement cytologic examination in a more accurate study of the cervix. Because of the expense and technical skill required, colposcopy will nev-

Table 4
Age Incidence of Squamous Carcinoma of the Cervix (1947-1956)

Age (Years)	Intraepithelial		Invasive (1053)	
	No. Patients	Per cent	No. Patients	Per Cent
15-19	1	0.3		
20-24	17	5.1	9	0.9
25-29	48	14.2	40	3.8
30-34	63	18.6	96	9.1
35-39	62	18.3	136	12.9
40-44	54	16.0	120	11.4
45-49	37	10.9	164	15.6
50-54	20	5.9	154	14.6
55-59	13	3.8	125	11.9
60-64	9	2.7	81	7.7
65-69	11	3.3	58	5.5
70-74	2	0.6	40	3.8
75-79			20	1.9
80-84	1	0.3	9	0.9
85-89			1	0.1
Totals	338		1,053	
Average age		39.4		48.7
Age range (years)		19-80		21-85

er be as generally adaptable as are genital smear preparations.

In the first five years of this study, 1947 through 1951, the clinicians of our department considered the cervix "benign" in 87.8 per cent and "malignant" or "questionably malignant" in 12.2 per cent of 131 patients with stage O cancer⁽⁹⁾. We have made an overt effort to evaluate the cervix more carefully. At the end of 10 years, 1947 through 1956, and with a total of 338 patients with stage O cancer, the clinical impressions of the cervixes were recorded as benign in 86.6 per cent of the cases and malignant or suggestive of malignancy in 13.3 per cent. The examiners are no more adept at recognizing *in situ* cancer than we were at the end of the first five years. These facts illustrate the obligation to screen all female patients by means of cancer smears. (see table 5).

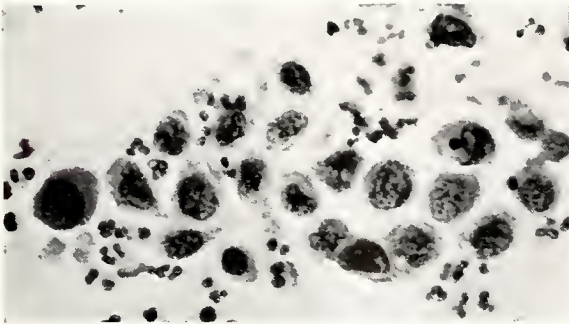


Fig. 1. Malignant parabasal cells of Papanicolaou: principal cytologic criterion in the identification of intraepithelial carcinoma. (Courtesy, Cuyler, K.: in McManus' Progress in Fundamental Medicine, Philadelphia, Lea and Febiger.)

Table 5
Intraepithelial Carcinoma of the Cervix: Clinical Impressions of the Cervix
(1947-1956)

Impression		No. Patients	Per Cent	
Clean and healthy		60	20.5	
Cervicitis		182	62.3	
Cystic	17			Benign, 86.6
Leukoplakia		11	3.8	
Questionable malignancy		34	11.6	
Cervical?	30*			Malignant, 13.3
Endometrial?	2			
Ovarian?	2			
Squamous cell carcinoma		5*	1.7	
No comment or unknown		46		
Total		338		

*Prior pathologic diagnoses made elsewhere were given as clinical impressions in 8 patients.

An analysis of the smear types in these 338 patients with intraepithelial carcinoma shows that only 3.5 per cent were reported as benign by the cytologist. Some false negative and some false positive reports were given from smears, and yet 58.6 per cent concerned the interpretation of intraepithelial cancer (see table 3). As far as clinicians are concerned, the 95.6 per cent accuracy in suggesting the exfoliation of atypical and anaplastic cells is the most important factor. Subsequent diagnostic procedures to obtain tissue for microscopic study are mandatory in these patients. Definitive therapy is *never* instituted on the basis of cytologic smear reports.

Management of the Patient with Neoplastic Abnormalities in the Papanicolaou Smear

The first step in management is to *repeat the smears* in order to eliminate technical and interpretative errors. The cytology is assumed to be reported again as Type III or one of its variants.

The next step is to perform a *biopsy* of the cervix as an office procedure if a questionable gross localized lesion is present. Random biopsies have not proved helpful, and may give a false sense of security. The chief value of multiple punch biopsies is to diagnose invasive carcinoma. If invasion can be proved by office biopsy, the patient is ready to begin definitive therapy in two or three days, and is saved the expense of hospitalization for cold knife conization of the cervix.

If pathologic studies of the punch biopsies fail to show intraepithelial carcinoma or do not demonstrate invasion in the presence of intraepithelial cancer, conization with a cold knife must be done. Multiple punch biopsies cannot be relied upon to exclude invasive cancer (see fig. 2).

Cold Knife Conization

Cold knife conization has become the preferred method of obtaining adequate tissue for the identification or the exclusion of invasive cancer. It is not an easy operation, and should be done only in an operating room. If an accurate diagnosis is to be established, sufficient nontraumatized tissues must be obtained from the proper area. Electrodisection is not satisfactory, because the current produces artifacts that prevent adequate histologic interpretation.

Technique: The cervix is mobilized with

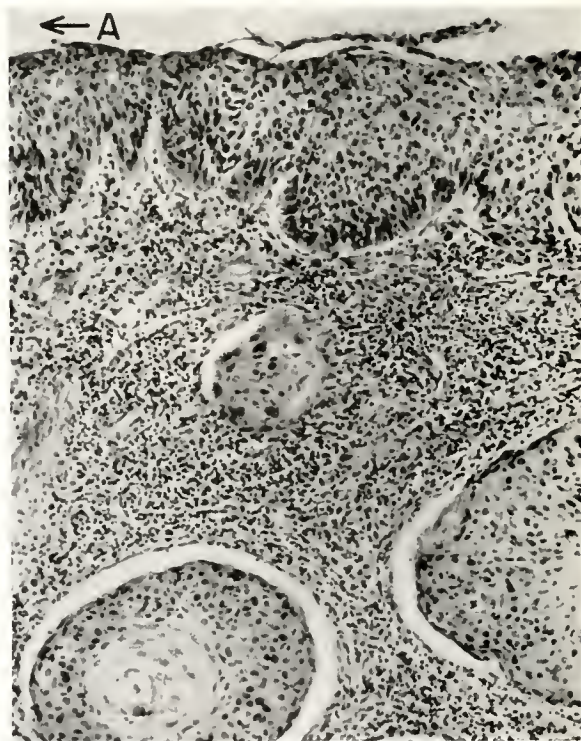


Fig. 2. Invasive cancer and overcoating of intraepithelial carcinoma in the same section. Punch biopsy at area A and to the left would have shown only intraepithelial carcinoma.

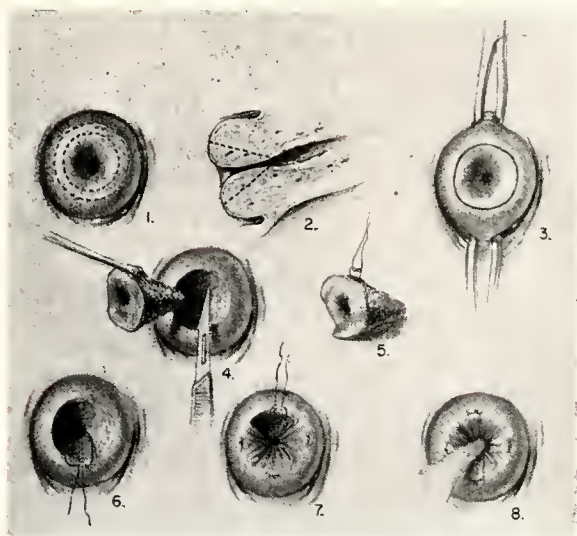


Fig. 3. Technique of cold knife conization. 1. Zone of incision. 2. Depth and angle of incision. 3. Traction and incision. 4. Cone with epithelial surface untouched. 5. Excised cone with 12 o'clock anatomic position identified by suture. 6 and 7. Sturmdorf suture closure. 8. Gause pack tampon.

a tenaculum or traction suture at the portio-vaginal junction. The epithelium of the tissue to be removed is not touched, the cervix is not dilated, and curettage is deferred until after conization. Special scalpel blades and conization instruments have been devised, but a no. 111 Bard-Parker blade has proved satisfactory to us. The incision is made about 1 to 2 cm. out on the portio and is extended at least 1.5 to 2 cm. into the endocervix. Excision is done in a circular manner. The cone is removed intact, if possible, and is marked at 12 o'clock for anatomic identification. Then the canal is dilated and the uterine cavity and endocervix are fractionally curetted. Hemostasis may be obtained by electrocoagulation, but in our experience four modified Sturmdorf sutures, or more if necessary, serve best to control the arterial bleeding and to prevent delayed hemorrhage during the necrotic, sloughing phase of healing. The cervix is packed with gauze, and the pack is removed 24 to 48 hours later (fig. 3). The patient is discharged on about the second to the fourth postoperative day.

Dilatations performed at monthly intervals, or as necessary, prevent postoperative cervical stenosis. We have had postoperative hemorrhage in an occasional patient, as has everyone else who performs an adequate conization. The bleeding can be controlled by packing or re-suturing the cervix. The

complications have not been serious and have not marred the beneficial results of the procedure.

Pathologic Study

The conization specimen must be systematically searched by the pathologist for evidence of intraepithelial and invasive carcinoma. The Stoddard method⁽¹⁾ is quoted in detail:

... the entire specimen is fixed in one piece.

The anterior and posterior lips should be clearly specified. After fixation, the cone is cut into thin—about 2 millimeters—sagittal blocks consecutively numbered according to a diagram. The first sections are taken from each paraffin block, and if provisional study of these sections indicates the need, selected blocks are cut serially. For research purposes I have systematically saved every fifth section for study, but there are practical limitations to be recognized. If sections are cut at 6 micra thickness, a sample is obtained about every one-tenth millimeter if only every fifteenth section is retained. Anything short of complete serial sections is an admitted compromise with practicality, and every laboratory will naturally work out the details best suited to its facilities and requirements.

The pathologist usually gives the clinician one of three diagnoses on the conization specimen: (1) chronic cervicitis with atypicalities; (2) intraepithelial carcinoma; (3) invasive carcinoma.

Treatment

Treatment must be individualized, dependent upon the pathologic diagnosis, age, parity, general health, and psychogenic factors. A general, working approach based upon our present limited knowledge of the disease is presented.

The diagnosis of chronic cervicitis with atypicalities—basal cell hyperplasia—cytologic atypism obtained by means of cold knife cone biopsy is considered as abnormal, but to a distinctly lesser degree than obvious carcinoma *in situ*. This diagnosis in itself is not considered reason enough for definitive therapy. As a word of caution it should be repeated that when made on tissue other than a full conization specimen, this diagnosis dictates the need for further diagnostic procedures by the same steps already outlined previously to identify or exclude invasive cancer. Patients with this diagnosis are observed with periodic examinations and Papanicolaou smears at six-month intervals.

The diagnosis of invasive carcinoma by

means of cold knife cone biopsy obligates immediate treatment by conventional methods for stage I cancer of the cervix. A diagnosis of microscopic foci of invasion dictates similar treatment, since any degree of invasion of the stroma implies actual or potential lymphatic spread.

The diagnosis of intraepithelial carcinoma reached by means of cold knife conization implies that invasive cancer has been ruled out within practical limitations. This assumption cannot be made if the tissue is inadequate, if the anaplastic process extends to the periphery of the tissue removed, and if the pathologic study is not systematic and thorough.

Any concept for rational treatment of intraepithelial carcinoma is based upon the postulate that cancer limited to the surface epithelium, including glandular surfaces, cannot metastasize. In the future this principle may be altered.

The patient factors which help to decide rational treatment are age, parity, desire for children, and general health. The patients can be divided into two groups: (1) those in whom the uterus is of functional value—young women who want more children; (2) those in whom the uterus is of no value—the young woman who has completed her family, the older woman, and the woman whose general health or previous operations preclude further childbearing.

In the first group of patients — those desiring to preserve the childbearing function—invasion has been excluded by conization. The patient and her husband are meticulously informed of the findings step by step, and must be permitted to make the final decision for conservative observation. Once the decision is made, childbearing is encouraged. The patient is followed every three months during the first year, and every six months thereafter. Follow-up studies include a careful history, meticulous inspection of the cervix, and genital cytologic smears. Cooperation of the patient and prudent care by the physician are obligatory.

There are 95 patients in our series who have not received definitive therapy (see table 6) In 3 of these, exfoliation of atypical cervical cells continues. Two vehemently oppose further diagnostic studies or definitive therapy because of their desire for more children. They are intelligent, co-

Table 6
Conservative Management of Intraepithelial Carcinoma of the Cervix*
(1947-1956)

	Multiple Punch Biopsy Only	Cold Knife Conization Only	Total
Gynecologic	8	64	72
Obstetric	7	16	23
Totals	15	80	95

*Three patients continue to exfoliate atypical cervical cells.

operative patients, and are being followed with extreme care. The third patient is 76 years of age, has severe hypertensive cardiovascular disease, and has been in and out of cardiac failure. Definitive therapy was deferred, after the cold knife conization, because of her very limited life expectancy.

Subsequent to the diagnosis of stage 0 cancer in these 95 conservatively managed patients, there have been 39 pregnancies, yielding 30 living babies.

More than 500 follow-up visits have been made. The duration of follow-up varies from two months to seven years.

In no patient has invasive cancer developed during the conservative phase of treatment.

All patients should have definitive therapy—total hysterectomy with removal of a wide margin of vaginal cuff — when the uterus is no longer considered functionally valuable. The reasons for eventual definitive therapy are: (1) the possibility that carcinogenic stimuli, of whatever source, may be operating in this susceptible patient; (2) the possibility of a false negative report on original pathologic examination; (3) the multifocal origin of intraepithelial cancer.

In the second group of patients—those in whom the uterus is of no further value—invasion must be excluded also, since definitive therapy for intraepithelial carcinoma is totally inadequate for invasive cancer of the cervix.

Regarding rational definitive therapy, we must remember again the principle that metastasis from intraepithelial cancer is impossible. Treatment must be directed toward removal of the "site of trouble," with preservation of normal womanly function as far as possible. There is no justification for irradiation therapy or radical Wertheim hysterectomy, with or without pelvic lymphadenectomy, in stage 0 carcinoma of the cervix. The inherent compli-

cations associated with either of these modalities of treatment exceed the risk of undiagnosed early invasive cancer, if the precautions as outlined are followed.

The treatment of choice is total hysterectomy with removal of a wide margin of vaginal cuff. During the past 10 years we have concluded that vaginal hysterectomy is preferable to abdominal hysterectomy. The necessary margin of vaginal cuff can be delineated better from below, under direct vision. Hysterectomy can be combined with colpoplasty repair when needed in the multiparous patient. Morbidity and mortality are less when the vaginal route is employed. The cervix is protected from tenaculum traction trauma by four braided silk traction sutures placed in the four quadrants at the cervicovaginal junction.

In the earlier years of the series we frequently removed the ovaries, even in the younger patients. In reviewing these patients, we feel that this procedure was too radical. We now conserve the ovaries and tubes in patients under 45 years of age.

The uterus, cervix, and vaginal cuff are removed intact. The 12 o'clock position on the cervix is identified by a suture before it is sent to the pathologist. The cervix and vaginal cuff are amputated, preserved, cut, and studied in the same manner as described for the cold knife conization specimen. This labor is necessary to identify or exclude any residual intraepithelial or invasive cancer that may have been missed by conization.

Follow-up

The patient who has had definitive therapy must be followed at six month intervals, or more often if necessary. The physician must consider two possibilities in following patients who have been treated for stage O cervical cancer; (1) recurrent cancer due to a negative diagnosis in previous histologic studies; and (2) the development of intraepithelial cancer in independent foci of abnormal cells in otherwise normal vaginal mucosa.

In 3 patients not included in this series, invasive cancer developed after they had received definitive treatment. In retrospect, critical analysis with further removal and study of sections revealed that in 2 of these patients diagnoses had been missed by pathology, and actually there was invasion when the diagnosis of pre-invasion was

made. The third patient had intraepithelial cancer proved by cold knife conization and was treated definitively by vaginal hysterectomy in 1951. Within six months Papanicolaou smears from the vagina again showed anaplastic cells. Between August, 1951, and July, 1955, this patient had a multitude of smears and histologic examinations of vaginal tissue.

Intraepithelial cancer was found in multiple separate sites in the upper vagina, and finally invasive cancer was proved. This patient has been reported in detail in a previous publication⁽⁹⁾ from our department. There is much room for speculation. We think this is a good example of the multicentric origin of this disease process.

Special Problems

Pregnancy

Intraepithelial carcinoma in pregnancy is, in our opinion, the same lesion which is present in the nonpregnant patient. We acknowledge the increased cellular activity, especially in the basal layer of the epithelium. We do not believe that true carcinoma *in situ* diagnosed during pregnancy will regress if left undisturbed after pregnancy. The operative biopsy may remove a localized abnormal focus of cells in pregnancy as in any other patient.

The real problem in pregnancy is how little can be done without missing a covert carcinoma, and how much can be done without disturbing the pregnancy. In brief, our methods of management are illustrated in 2 patients treated recently.

The first patient was 33 years old, had a nine-year history of infertility, and had an entirely clean cervix when the pregnancy was confirmed at three months. The genital cytologic smears were reported as type III, intraepithelial carcinoma. Subsequent smears at monthly intervals have been interpreted similarly, and the cervix has remained grossly clean. Random biopsies have not been done. Cold knife conization has been deferred. Careful observation of the cervix and serial smears will dictate the course. If there is no change, conization will not be done until the pregnancy is terminated and the uterus has involuted. The associated risk is minimal and the pregnancy is premium.

The second patient was 37 years old, and had seven living children. Marked cervical circumoral erosion was noted on the initial

examination in the fourth month of pregnancy. The cytologic report was type III, intraepithelial carcinoma. Biopsies from the cervix were reported as intraepithelial carcinoma. A cold knife conization confirmed this diagnosis, and disclosed no evidence of invasive cancer. The patient has not aborted. When this pregnancy terminates, definitive therapy probably will be instituted in view of her age and parity.

In pregnancy, usually we do not perform a biopsy on or conize a clean cervix unless the cytologic reports indicate more than type III smears. If, on the other hand, an abnormal-appearing cervix exfoliates abnormal cells, we do not hesitate to perform a biopsy or a cold knife conization during pregnancy. We have performed cold knife conization on patients during pregnancy without having an abortion as a complication of the operation. There is more bleeding, and care must be taken to obtain hemostasis. The post-conization cervix does not present any problems of dystocia during labor and delivery.

Cervical stump

Intraepithelial carcinoma in a cervical stump presents a special problem only when the stump is large enough to be employed in subsequent radium therapy if the lesion proves to be invasive. This stump is conized by the cold knife technique. When the stump is small and cone biopsy will remove all but a shell of the portio, we feel that the entire stump, along with a margin of vaginal cuff, should be removed. This specimen is submitted for microscopic analysis in the same manner as the tissue obtained by cone biopsy.

Summary

Our departmental concept of the diagnosis and treatment of intraepithelial carcinoma of the cervix is presented.

This plan of management is formulated from a study of 338 patients with intraepithelial carcinoma seen during the past 10 years. The incidence was 0.59 per cent in 50,324 gynecologic patients and 0.55 per cent in 8,000 obstetric patients.

Intraepithelial carcinoma was detected almost entirely by genital cytologic smears. There are no reliable symptoms and the lesion does not have a characteristic gross appearance. Genital cytologic smears must be done on the pregnant patient, since the incidence is almost the same as in the non-pregnant patient. Smears must be done on the young woman as well as the patient in the "cancer age group." In this series, 55.6 per cent of the patients were below the age of 40 years.

The need for, and technique of, cold knife conization is discussed in detail.

The conservative plan of management is practiced when the childbearing function is significant and more children are desired.

Vaginal hysterectomy with removal of a wide margin of vaginal cuff is considered the treatment of choice when definitive therapy is indicated. The ovaries are conserved in patients under 45 years of age.

The special problems associated with carcinoma *in situ* in pregnancy and in the cervical stump are discussed.

The salvage rate in intraepithelial carcinoma of the cervix should be approximately 100 per cent when this concept in diagnosis and management is followed.

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Radiology in North Carolina: 1896 - 1916

WILLIAM H. SPRUNT, III, M.D.

CHAPEL HILL

In the NORTH CAROLINA MEDICAL JOURNAL, January 20, 1896, under "Miscellaneous Items," there is this announcement:

A wonderful discovery is reported by a scientist in Vienna. He has discovered a light, so the newspaper reports announce, which will penetrate wood or flesh, and photographs can be taken of objects in the interior of a box or the animal body. He proposes to photograph bullets which have gone astray in the body, and even to photograph the skeleton of a patient to diagnose fractures and dislocations and other abnormalities. Now there is no reason for the cynic to complain that Providence would have been wiser to have made man with a glass window in his chest⁽¹⁾.

This, I believe, is the first mention of the discovery of x-rays in North Carolina medical literature. The statement that Roentgen was from Vienna is erroneous. He lived and worked in Wurzburg, Germany, during the time of the discovery, but through a journalistic scoop, the news reached the world via London with a Vienna dateline.

Pioneer Work at Davidson

On January 6, 1896, the Associated Press dispatch concerning the announcement of the new kind of rays was published in the United States. At that time many scientists in this country, as in the rest of the civilized world, had been studying the same physical phenomena of cathode ray production as Roentgen had been studying when he discovered the simultaneous production of x-rays. Since many workers had equipment identical or very similar to that used by Roentgen, rapid duplication of his experiments was possible. In North Carolina one of the first scientists to repeat Roentgen's work was Professor Henry Louis Smith of Davidson College.

Dr. Smith, a Ph.D., was listed as professor of natural philosophy, which meant that he taught mineralogy, meteorology, geology, physics, and astronomy. His abilities eventually led him to the presidency of Davidson College and later of Washington and Lee University. During the first World War he was honored by the British and

French governments for the invention of a collapsible balloon used to drop propaganda leaflets behind German lines, an invention credited to some extent with bringing about the collapse of Germany.

It has been stated that just before the Christmas holidays at Davidson College in 1895, Professor Smith had been demonstrating the production of cathode rays to his physics class in experiments similar to those which had been extensively performed throughout the world⁽²⁾. Perusal of the notebooks of one of the students in that class, Mr. Osmond Barringer of Charlotte, reveals no mention of these experiments, even though he seems to have made lengthy and precise notations of the entire lecture series. Nor is there evidence, as is sometimes asserted, that when school reassembled Dr. Smith told his class about Roentgen's discovery and described the way in which he intended to repeat the experiments at Davidson.

Student escapade

On Sunday evening, January 12, 1896, three junior students—Osmond Barringer, Eben Hardie, and Pender Porter—bribed a Negro janitor to let them into the building where Professor Smith's electrical apparatus was kept, with the idea of making a roentgen photograph. Mr. Barringer, the leader of the group and the only survivor today, had been interested in static electricity, used in the production of cathode and x-rays, and was also a good amateur photographer. After reading the Roentgen announcement, he eagerly sought all the information he could find, and concluding that with the equipment at Davidson a radiograph could be made, he persuaded the other two men to join him in the venture.

Earlier in the day Barringer had crept into the "stiff house," where cadavers for North Carolina Medical College, located at Davidson, were kept soaking in solution, and he had hacked off a finger from a Negro cadaver with his pocket knife. This he carried along as one of the objects to be x-rayed, placing on the finger a ring belonging to a girl friend. Also placed on top of the photographic paper were an egg

From the Department of Radiology, School of Medicine, the University of North Carolina, Chapel Hill.

shell with a button in it, a rubber-covered magnifying glass with its case, some pins (placed under the finger and not through it as often reported), some cartridges, a few round paper clips, and six strychnine tablets, the kind students took to keep awake during examination cramming sessions in those days (fig. 1).

The tube was placed two feet away from this strange assemblage, and the exposure was begun at almost exactly 8:00 P.M. Since DC current was supplied to the college from the town cotton mill, the students did not have to use a tiresome static generator. When the mill ceased operation at 11:00 P.M., the exposure ceased. Barringer felt that a three-hour exposure might be too long, but he also was not certain that he would have another chance to perform the experiment and wanted to be sure that there would be something on the film. It was developed immediately and the result was a radiograph of good quality, a print rather than a negative such as we are accustomed to viewing today. All the objects mentioned may be identified on the original in the Davidson College library⁽³⁾, but attempts to reproduce it in figure 1 have resulted in loss of detail.

This was without doubt the first roentgenogram produced in North Carolina and possibly the first in the United States. Dr. R. L. Lafferty of Charlotte, who explored this controversy, accepts the statement of Professor M. I. Pupin of Columbia that he made an earlier roentgenogram⁽²⁾. It is said that Thomas A. Edison began work on Roentgen's experiment on the day that the news reached America and may have made an earlier picture⁽⁴⁾. But, as Mr. Barringer says, the Davidson roentgenogram is the only one which has ever been produced in evidence.

Although knowledge of the students' radiographic escapade was known among their fellow students, the information was closely guarded from the faculty for fear of reprisal. Mr. Barringer is not certain when Dr. Smith discovered that they had made their roentgenogram, but it was not until several years later.

Dr. Smith's roentgenogram

Meanwhile, Dr. Smith proceeded leisurely with his own studies of Roentgen's work. He obtained the arm of a Negro cadaver from Dr. J. P. Monroe, professor of anat-

omy at North Carolina Medical College. In his backyard, which must have been well shielded from the neighbors, Dr. Smith chopped off the hand at the wrist and fired a pistol bullet into the palm. He stated in a letter that he then made a roentgenogram with a five-minute exposure with current from a static generator, and obtained what was called an excellent negative⁽⁵⁾. This has evidently been lost, and except for the newspaper reproductions I know of no copies today.

The exact date on which Dr. Smith made his roentgen photograph is unknown. It may have been on Monday, January 13, as he implied in a letter⁽⁶⁾, but the more widely accepted date is February 22, 1896. At any rate, Dr. Smith either sent this picture or made another and sent it to the *Charlotte Observer*, which printed it along with a story about Dr. Smith on February 27, 1896. The article described how the bullet penetrated the flesh and bone but is "clearly visible." Probably not many readers were convinced of the value of the radiograph from the newspaper reproduction, for the bullet is almost indistinct, more suggestive of a printer's thumbprint than anything else. But the *Observer* proudly announced that this was a better photograph than those produced at Columbia or Yale and published in scientific journals⁽⁵⁾.

The Use of X-rays for Medical Diagnosis

In the field of diagnosis the early North Carolina medical literature is filled chiefly with reports of foreign body localizations in the esophagus, trachea, and extremities. Henry Louis Smith figures again in the most famous incident in our state, when for the first time he localized a foreign body in the trachea. In fact, Dr. R. L. Lafferty stated that he was the first in the nation to accomplish this feat⁽²⁾.

Foreign body in the trachea

Having read of the Davidson x-ray in the *Charlotte Observer*, a family in Harrisburg (Cabarrus County), solicited Professor Smith's aid for their 6 year old daughter. She had been playing with a small thimble, the tubular type, open at both ends, common in that day, and while carrying it in her mouth had suddenly aspirated it. After some initial pain and coughing she seemed well, but in a few days developed "tonsillitis." She recovered from this episode and was well for about a week, when suddenly

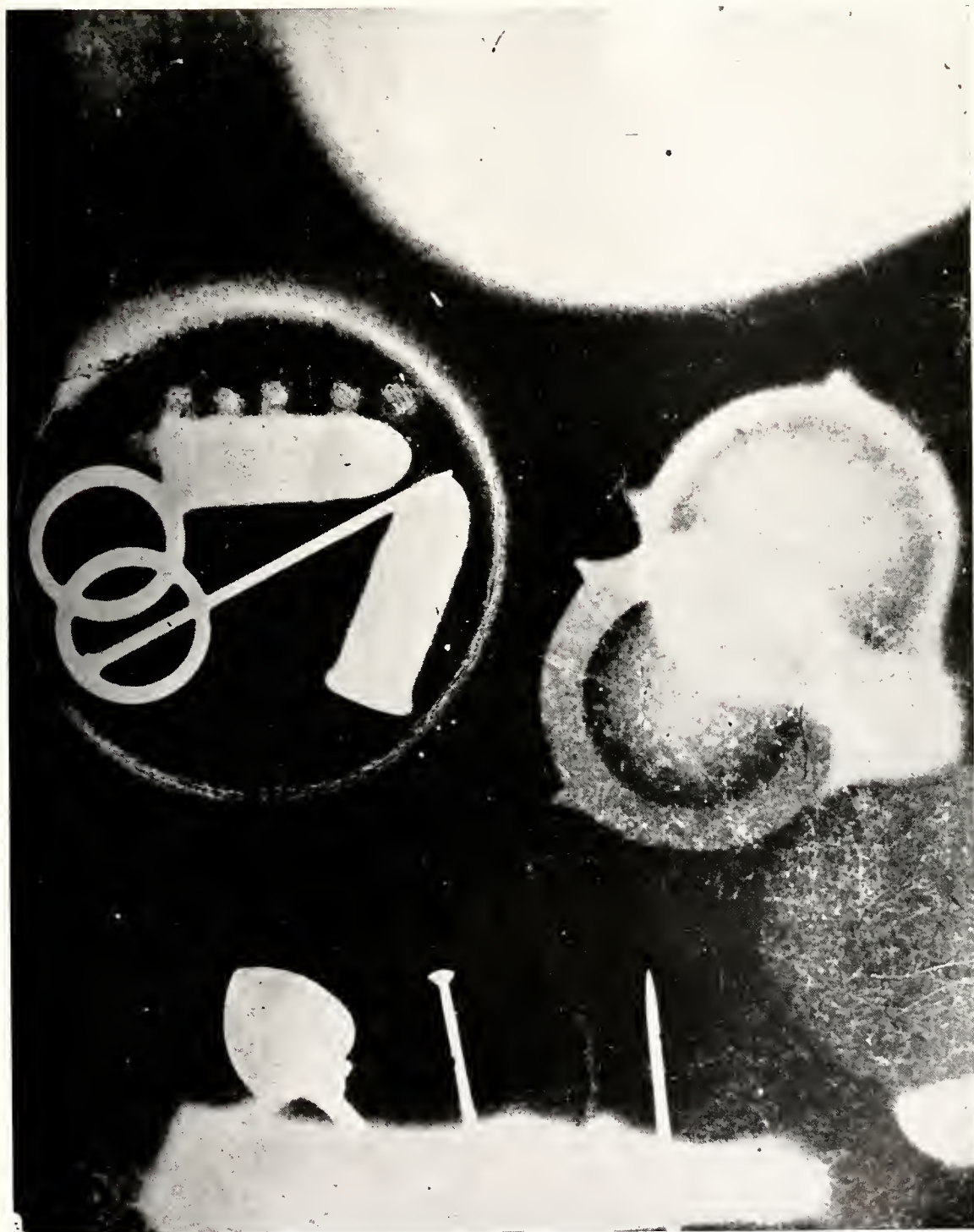


Fig. 1. This is an enlargement of a copy of the original roentgenogram made by the students at Davidson. The objects mentioned in the text can be identified. (Courtesy, Mr. Osmond Barringer and the Photo Products Division of the E. I. du Pont de Nemours Co.)

she had a violent attack of coughing which lasted 24 hours. Following this she was unable to swallow and became extremely emaciated, in spite of frequent tube feedings. Several doctors had been called to see her and decided that she was "dying either of a throat disease or from the presence of a tailor's thimble in her throat." Dr. Smith related that sometime after this he was stopped on the street by an unidentified young man and asked if he would examine the child by means of the newly discovered rays. He consented⁽⁶⁾.

Thus on a cold, damp day in December, 1897, a wagon was sent to Davidson and Dr. Smith loaded his heavy storage battery and induction coil into it, selected one of his better tubes, and set off on the 25-mile journey⁽⁶⁾.

It seems a strange coincidence that Dr. Smith should have requested student Barringer to accompany him on this trip, and Mr. Barringer says today that the fact that he did so is a certain sign that he did not know of the student x-ray experiment. The indignant tone of Dr. Smith's letters written in later years regarding the student roentgenogram supports this opinion.

Having arrived at the home, they assembled the apparatus and suspended the little patient in a sheet held by the corners. Professor Smith crawled beneath the sheet, fluoroscopic screen in hand. For a fleeting instant in the wavering light, at a moment when the flickering tube was functioning best, he was certain that he saw a thimble in the chest.

On the basis of this evidence the patient was taken to Charlotte for an operation, but as is the way with physicians, her doctors demanded to see the proof with their own eyes. Again the Professor made a lengthy trip, and again he demonstrated to his own satisfaction that the thimble was present, though he wrote later that he was not sure that the doctors had really seen it. The doctors in turn doubted that the parents had seen it, as they evidently were hesitant about permitting surgery even after the x-ray examination. A wire instrument passed down the esophagus was seen to lie behind the thimble, placing it in the trachea.

Dr. C. A. Misenheimer with Dr. Irwin operated on the patient at the Charlotte Private Hospital. The thimble was found in

the right main bronchus. There was associated necrosis of the cartilage and evidently some damage to the "pneumogastric nerve as she was unable to swallow anything for several weeks after the removal of the thimble . . ." Though the patient seemed slowly to regain her health and soon became a "rosy cheeked girl," in the eyes of the physician⁽⁵⁾ she was never very well, according to a recent letter from her brother, and she lived only to the age of 19⁽⁹⁾.

Other localizations

A clipping in the Davidson College library dated 1898⁽¹⁰⁾, refers to another foreign body localized by Dr. Smith. This patient was evidently referred by Dr. Misenheimer following the satisfactory results in the first case⁽⁸⁾. A 12 year old girl from Wilmington aspirated a hat pin 2½ inches long. The roentgenogram revealed the pin to lie diagonally across the trachea at the carina. At operation only the glass head of the pin could be removed, and the rest was left to nature. Fortunately, it was extruded through the right side of the chest in about six weeks.

In the NORTH CAROLINA MEDICAL JOURNAL of January 5, 1898, Dr. K. P. Battle of Raleigh mentioned the unsuccessful attempt of Professors Gore and Whitehead at Chapel Hill to visualize a shawl pin in the larynx of a little girl. With the equipment on hand at that time, they could only say that the object was not located above the sternum⁽¹¹⁾.

Dr. Hubert Royster of Raleigh described the splendid x-ray apparatus belonging to Professor James L. Lake at Wake Forest. This consisted of a gas tube and powerful Rumford induction coil with an output of 50 to 100 thousand volts and a current of 25 to 30 milli-amperes. With this equipment, Professor Lake helped Dr. Royster locate a needle in the hand of a Negro woman, probably early in 1898. Professor Lake performed several localizations for other physicians, but I have not been able to learn any specific information about them except for another instance in 1903, when he localized a foreign body in the thigh. His equipment was kept in use at Wake Forest for demonstration purposes until 1930, when it was destroyed by fire⁽¹²⁾.

The final localization of which there is a record during the period under discussion was in 1902. In that year Dr. J. W. Long

of Salisbury reported 2 cases, one a 7 year old child who had swallowed a tin whistle and the other a 46 day old infant who had swallowed a safety pin. In both, x-ray localization was used successfully⁽¹³⁾. Probably after 1902, the usefulness of x-ray for this purpose was so widely recognized that sporadic case reports cease.

In fact, after about 1902, following the flurry of reports in the early years, the number of papers concerning roentgen diagnosis decreased. This is not to say that such articles disappeared from North Carolina medical literature, but original contributions by North Carolina physicians almost disappeared. Articles by physicians from other states are plentiful, both in abstract and in full form. These papers, of course, made a definite contribution to North Carolina medical practice, but specific reference to them is outside the scope of this presentation.

Advertising

One interesting feature of North Carolina medical literature which appeared first in 1902 is the advertising of x-ray equipment, and of schools giving courses in x-ray diagnosis and therapy. "Do you wish to rent a 16-plate static x-ray machine? You can rent it for from \$6.00 to \$8.00 a month from Grand Rapids X-ray Mfg. Co. . . ." Along with this announcement is a picture of a huge box-like structure with wires, metal spheres, and projecting coils. From the size of the wire which the patient appears to be holding, one wonders if the patient may light up instead of the tube⁽¹⁴⁾.

The Illinois School of Electro-Therapeutics was the first to advertise courses for physicians in the use of the roentgen ray (1901). The courses were for periods of one to three weeks; the instructors were outstanding. No mail diplomas were offered, to the credit of the school⁽¹⁵⁾.

Pioneers in radiology

Not until 1913 was the next paper on x-ray published. The author was Dr. Joseph Graham, surgeon to Watts Hospital, Durham, who described the importance of x-ray in treating fractures. Several good illustrations are included⁽¹⁶⁾. Though the national literature contained many reports of the value of the roentgenogram in reducing fractures by this date, this is the first by a Tarheel physician which I have been able to locate.

Dr. R. L. Pittman, who is still in active practice in Fayetteville, states that he was using roentgen rays for diagnosis and therapy as early as 1912. He and Dr. Highsmith purchased first a Toper-Holtz machine, a large static apparatus, producing over 100 kilovolts and probably one milli-ampere current. A few years later they purchased the revolutionary Snook apparatus, with an output of 100 kilovolts at 100 milli-amperes. Dr. Pittman spent some time in the Snook factory so that he could make any repairs that might become necessary. Even in 1912 Dr. Pittman was using protective goggles and an apron, and today he has no evidence of radiation injury, though he has combined a great deal of x-ray work with his surgical specialty. His first article was published in 1914 and was concerned with therapy; it will be discussed in the next section⁽¹⁷⁾.

The first full-time x-ray physician in North Carolina, the first radiologist, was Dr. James Williamson Squires of Charlotte. Dr. Squires graduated from North Carolina Medical College in 1911 and went to Johns Hopkins for postgraduate study. In 1913 at that institution he became interested in roentgenology and later studied at the Rockefeller Institute and at the New York Post-Graduate Hospital, which offered probably the best organized course in x-ray diagnosis of that day. It must have been in 1915 that he returned to Charlotte to take over the operation of the x-ray equipment previously installed at the Charlotte Sanatorium by Dr. W. D. Witherbee, professor of electrotherapeutics and skin disease at North Carolina Medical College, himself a pioneer in x-ray diagnosis and therapy⁽¹⁸⁾.

Dr. Squires went to France in 1917 with the Yale Mobile Hospital Unit. At first he had to be content with French equipment, which he successfully mastered. Later he received the American apparatus, and may have used the first American-made tube to reach France. Only 6 miles behind enemy lines he set up a unit consisting of three rooms and a bedside machine, with which he and six assistants could handle 200 cases a day, and "this with the tedious multiple localizations practiced on patients difficult in the extreme to manipulate⁽¹⁹⁾. The constant strain on both mind and body produced by his unremitting labors prob-

ably contributed to his death from pneumonia in December, 1918.

Some indication of our loss through the premature demise of Dr. Squires can be found in his publications, which, when compared to other publications of the same period, seem to show an unusual degree of insight into radiologic problems. This is especially true of his studies of the gastrointestinal tract, which I judge to have been his special interest.

In January, 1915, he wrote of "The Value of X-ray in Diagnosis," stressing the importance of recent improvements in equipment and film as well as interpretation, which made this medium valuable as a diagnostic aid in lesions of the teeth, sinuses, mastoids, bones, and the gastrointestinal tract⁽²⁰⁾.

Another paper in the same year was concerned with the diagnosis of gastric lesions⁽²¹⁾. In this he described the technique of the examination, the criteria for the diagnosis of gastric cancer, and the differential diagnosis of cancer and chronic gastric ulcer, a problem which has not been solved to this day.

In 1916 "The Diagnostic Value of the Rontgen Ray in Surgery" was published, with a scathing criticism of the man who poses as a roentgenologist and also professes to be a "surgeon, obstetrician, pathologist or bacteriologist. Possibly he may say a bone is fractured but that is all. When he attempts to use the x-ray for gastrointestinal diagnosis or other complicated investigations, he is the man who brings x-ray into disrepute . . ." ⁽²²⁾ This is a reminder of the constant battle of the early radiologist to make his calling respectable at a time when photographers and other "picture takers" were degrading roentgenology to the status of a laboratory method. The radiologist of today is indebted to Dr. Squires and others like him for the respected status of the radiologist today.

The Use of X-ray and Radium for Therapy

In 1904 the first articles on radiation therapy by North Carolina physicians appeared in the literature. Contributions by men from other states can be found earlier in North Carolina journals and no doubt were of great importance to our physicians, especially papers like those of the pioneer

radiologist, Alfred L. Gray of Richmond, who was a frequent contributor.

The first radium in North Carolina belonged to Professor Charles Baskerville, director of the Chemical Department and Smith Professor of Chemistry at the University of North Carolina. Dr. Baskerville progressed from freshman student to full professor in 12 years. As a student he was playing manager of the football team, and was a member of the championship 1892 team. It was said that he could kick four out of five goals from the center of the field, and it is surprising that with today's emphasis on sports he is not better remembered for these accomplishments, if not for those as a chemist or radium pioneer.

Dr. Baskerville obtained his radium from the Curie laboratory and was at first interested in the action of the gamma rays on minerals and gems⁽²³⁾. Gradually his interest turned to the medical uses of radium, and in 1904 he spoke before the State Medical Society on "Radium and its Application to Medicine."⁽²⁴⁾ Speaking from notes illustrated by numerous experiments, he summed up the knowledge of the physical and biologic properties of radium to that day. In 1905 he published a book entitled "Radium and Radioactive Substances—Their Application to Medicine."⁽²⁵⁾ The details of radiation physics, quite complicated even then, are discussed in a lucid and readable manner. The book contains a reference to some laboratory work with radium chloride, which he and Dr. Isaac Manning, later Dean of the Medical School at the University, were completing, though these experiments were not directly related to medicine.

It is said that the first authenticated use of radium in the treatment of cancer of the cervix was administered by Dr. Margaret Cleaves of New York⁽²⁶⁾. To us it is of interest that Dr. Cleaves heard an address by Professor Baskerville at Atlantic City, and from him she obtained 1 Gm. of bromide of radium contained in a sealed glass tube, with which she treated her first patient. In 1904 Dr. Baskerville resigned from the University to direct the Department of Chemistry at the City College of New York.

Dr. W. W. McKenzie of Salisbury was one of the first North Carolina physicians to publish a paper on "Radiotherapy for Cancer and other Diseases," this in 1904.

He described the advantages of radiation therapy, stating that it (1) is painless, (2) will destroy diseased tissue and spare healthy tissue, (3) produces only small scars, (4) has an anodyne effect, and (5) is useful in lesions too extensive for surgery. Dr. McKenzie mentioned several cases which he treated with x-ray, especially epitheliomas of the leg, lip, nose, and a case of lupus vulgaris. All his patients responded nicely in a few months⁽²⁷⁾.

Dr. J. Thomas Wright of Winston-Salem briefly reported in 1908 a group of lesions which "yielded surprisingly to electricity, to x-ray treatment, Snow's tubes and Mechanical Vibration." He reported therapeutic triumphs over epitheliomas, cancer of the breast, uterine fibroids, cervical adenitis, acne, and eczema. In most cases several of the modalities were used, and an objective evaluation is impossible⁽²⁸⁾.

In 1914 Dr. R. L. Pittman of Fayetteville reported "The Use of the X-ray in the Treatment of Inoperable Cancer and Superficial Epitheliomas."⁽²⁹⁾ He emphasized the necessity for protecting normal tissues with lead, and like many others advised against using the hand to judge the output of the x-ray tube because of the danger of radiation dermatitis. Dr. Pittman treated 108 epitheliomas, principally of the face, varying from the size of a split pea to that covering one whole side of the face. "In not a single case [did he] fail to secure as yet a permanent cure."⁽²⁹⁾

Dr. James W. Squires in 1917 published an article covering work done in the previous years. This paper was entitled "The Value of Roentgen-Ray Therapy with Special Reference to Post-operative Roentgen Treatment of Carcinoma of the Breast."⁽³⁰⁾ He emphasized the absolute indications for x-ray treatment in that condition. Multiple portals were advised, and he urged that therapy begin within a few days after surgery.

Conclusion

Thus ends the review of this arbitrary period. I do not know of any radiologist today who was practicing in this state before 1917, including members of the North Carolina Radiological Society. There must have been many physicians who utilized x-ray to some extent for diagnosis or therapy during this interval who have been overlooked. For example, Dr. Hunter

Sweeney of Durham wrote that his father had a static x-ray machine in Leaksville early in the century, which Dr. Sweeney as a boy often had to crank. This is probably why Dr. Sweeney remembers it so well, for though the generators were said to be hand operated, it usually required hand, shoulder, hip, and eventually half the body to turn them properly.

My records of hospital departments of radiography are incomplete. In addition to the Charlotte Sanatorium, the Atlantic Coastline Hospital at Rocky Mount had one of the first units in the state, and Grace Hospital in Morganton made plans for one at an early date.

At least we have evidence that there was a wide interest in radiation both for medical diagnosis and therapy in North Carolina from 1896 to 1916. As in every part of the world, this wonderful discovery was to usher in a new era of medicine during the next half century.

ACKNOWLEDGMENTS

Since this paper represents purely an attempt to collect and correlate historical material, I am indebted to many individuals who have supplied information. This includes physicians, laymen, hospital administrators, relatives, and friends of the physicians mentioned. I must acknowledge my particular debt to the members of the Division of Health Affairs Library of the University of North Carolina, to Professor Chalmers Davidson of Davidson College, to Doctors John O. Lafferty, Claude B. Squires, R. L. Pittman, and R. A. Ross. I also wish to thank especially Mr. Osmond Barringer and Mr. Samuel C. Harris for taking the time to give me their personal recollections of several of the events mentioned.

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The Effect of Epinephrine Derivatives in Preventing Anterior Chamber Hemorrhage Following Cataract Extraction

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The refinements in the technique of cataract surgery which have evolved have reduced the incidence of such complications as postoperative infection, vitreous loss, iris prolapse, rupture of the wound, and epithelial downgrowth. One of the most important postoperative complications still observed in cataract surgery is anterior chamber hemorrhage. Its exact etiology and best treatment is still undetermined.

Neff⁽¹⁾ concluded from his series of cases that the most obvious cause of postoperative hemorrhage was trauma at the time of, and subsequent to, surgery. Other factors that he considered important were rapid filling of the anterior chamber, promoted by a conjunctival flap and tight closure of the corneoscleral wound. Forceful contraction of the orbicularis palpebrum, iridectomy, low and high hemoglobin values, low plate-

let counts, and high petechial counts are listed as contributory factors. Owens and Hughes,⁽²⁾ in a review of 2,086 extractions of uncomplicated senile cataracts, concluded that tight closure of the corneoscleral wound with two sutures is an important factor in reducing the incidence of postoperative hemorrhage. They also concluded that postoperative hemorrhages were less common with shallow sections which were poorly vascularized, and blamed the incidence of hemorrhage on the rupture of small capillaries invading the deeper healing incisions. Lee⁽³⁾ also found that corneoscleral sutures reduced the incidence of postoperative hemorrhage by more than 50 per cent. Birge⁽⁴⁾ believes that a mild polycythemic state is a factor in postoperative hemorrhage in cataract extraction, and practices preoperative phlebotomy in these cases.

It has been observed that the injection of epinephrine intravenously shortens the bleeding time.⁽⁵⁾ Epinephrine is rapidly

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destroyed by oxidation and produces a series of unstable derivatives. The first oxidation product was isolated in 1937 by Green and Richter⁽⁶⁾ and named adrenochrome. This is a very unstable product, but its monosemicarbazone (Adrenoxyl*) is stable. Adrenoxyl is only slightly soluble in water. This oxidation product of epinephrine has none of the sympathomimetic properties of its parent substance—that is, it is devoid of hypertensive and vasodilatory effects, and does not raise the blood pressure or affect cardiac rate or volume. The drug is said to reduce the mean bleeding time and to check bleeding from a broad capillary bed by reinforcing the local vasomotor reactions resulting from vascular trauma. It decreases capillary permeability, increases capillary resistance, and promotes the retraction of severed capillary ends. Adrenoxyl is believed to be stored in the peripheral tissues, possibly in the vascular cells or in their vicinity, thus providing a reserve from which epinephrine may be regenerated locally according to need. The effect of adrenochrome is thought to be on the intercellular cement substance of the capillaries.

A study was undertaken to evaluate the effect of these epinephrine derivatives in the prevention of postoperative anterior chamber hemorrhage.

Materials and Methods

As a first attempt to investigate the effect of adrenochrome on postoperative bleeding in cataract surgery at McPherson Hospital, Adrenoxyl was administered to every other one of 88 cases. The dosage suggested by Boehringer⁽⁷⁾, who had reported favorably on the use of this drug in cataract surgery, was used. The results of this series showed Adrenoxyl to have little effect on the incidence of postoperative hemorrhage of the anterior chamber. Unfortunately, an antihistamine (Dramamine) had been given to these patients during the period in which they received Adrenoxyl. Only while the investigation was underway was it learned that—according to Kuschinsky⁽⁸⁾—antihistamines may have an inhibitory effect on adrenochromes.

A second adrenochrome derivative, however, became available. (This was adrenochrome monosemicarbazone salicylate com-

Table 1
Effect of Adrenosem on Incidence of Postoperative Hemorrhage after Cataract Extractions (126 cases)

	No Hemorrhage	Mild Hyphemia	Severe Hemorrhage
No treatment (63 cases)	47	14	2
Adrenosem (63 cases)	52	10	1

All 3 cases of severe hemorrhage were the result of trauma inflicted by the patient

plex, supplied under the name of Adrenosem.*) It was found that this was a stable, much more soluble preparation which could be secured by combining the semicarbazone of adrenochrome with small amounts of sodium salicylate. Because of these properties, much larger amounts of the drug can be administered intramuscularly than was the case with Adrenoxyl.

Our interest in the use of this substance was prompted by the favorable results reported in the literature in the treatment of epistaxis, idiopathic purpura, post-tonsillectomy and adenoidectomy bleeding, pulmonary bleeding, and other conditions characterized by capillary hemorrhage.

Using alternate cases unknown to the surgeon, one 5 mg. ampule of the drug was administered twice daily for three days, the first dose one hour postoperatively, followed by 2.5 mg. tablets by mouth four times daily from the fourth through the seventh postoperative day. The series comprised a total of 126 cataract patients. Five surgeons, all of whom used corneoscleral sutures, participated in the series.

Results

Of the 63 patients who did not receive Adrenosem, there were no hemorrhages in 47 cases, mild hyphemia developed in 14 cases, and severe postoperative hemorrhages occurred in 2 cases. Of the 63 patients receiving Adrenosem there were no hemorrhages in 52 cases, mild hyphemia occurred in 10 cases, and severe hemorrhage in 1 case. No antihistamines were used in this series. The three severe postoperative hemorrhages were all the result of trauma inflicted by the patients themselves.

Excluding the definitely traumatic cases with severe hemorrhage, the incidence of

*The Adrenoxyl for this study was kindly supplied by: Synthetic Fertilizers and Chemicals of New York, N. Y.

*The S. E. Massengill Company, Bristol, Tennessee.

hyphemia in the patients who did not receive Adrenosem was 22 per cent, as compared with 16 per cent in patients receiving the drug.

In 21 of these cases, the bleeding time was determined on admission, before operation, after three days of Adrenosem given intramuscularly, and on the fifth day of Adrenosem therapy administered intramuscularly and by mouth. No definite correlation between the bleeding time and the incidence of hemorrhage was found. Administration of Adrenosem caused no appreciable decrease in bleeding time in those patients receiving it. It was interesting to observe, however, that during the period of observation the bleeding time increased four to five time more often in those patients who had not received the drug.

Comment

It is of considerable interest to determine in what way postoperative hemorrhage influenced the final visual result in the group under observation. These results are shown in table 2. It can be seen that, excluding again the traumatic cases, of 24 patients, 18 obtained vision between 20/30 and 20/20. One patient with 20/40 and one with 20/50 vision were among those who had had extracapsular extractions. One patient showed chorioretinal atrophy, 1 corneal dystrophy, and 1 was known to be amblyopic before operation. It would appear, therefore, that in only 1 case was anterior chamber hemorrhage responsible for a final visual acuity of less than 20/30. From our observations of 126 patients of cataract extractions, half of whom received Adrenosem, it appears that the incidence of postoperative hemorrhage was somewhat lower in the group of patients that received the drug. The difference between these and the group that did not receive Adrenosem is not impressive. It is admitted that much larger doses have been used in cases in which favorable results have been reported in other fields. For prophylaxis, however, such massive dosages would appear unwarranted, particularly since it was found that postoperative hemorrhage in this series, unless produced by trauma, hardly seemed to impair the final visual result.

Summary

1. The causes of anterior chamber hemorrhage following cataract extraction are reviewed.

Table 2
Visual Results in 27 Cases of Postoperative Hemorrhage (27 cases)

Degree of Bleeding	No. Cases	Visual Results
Sever hemorrhage	1	
	1	
	1	
Total	3	
Mild hyphemia	9	20/20
	5	20/25
	4	20/30
	2	(1 extracapsular extraction) 20/40
	1	(extracapsular extraction) 20/50
	1	(chorioretinal atrophy) 20/60
	1	(corneal dystrophy) 20/100
	1	(amblyopia exanopsia) 20/200
Total	24	
Total		27

2. The possible modes of action of epinephrine derivatives in reducing capillary hemorrhages are discussed.
3. The effects of Adrenosem on the incidence of postoperative anterior chamber hemorrhage in 126 patients are reported.
4. Patients receiving Adrenosem for seven days following operation were found to have a slightly lower incidence of mild postoperative hemorrhage than did those who did not receive Adrenosem.
5. In only one patient did postoperative hemorrhage result in a final visual acuity of less than 20/30.

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The Doctor-Patient Relationship

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In this paper I would like to discuss two interrelated topics: (1) the complexity of forces operating in any conception of disease or illness, including the crucial role of emotional or psychosocial forces in the production of disease and the return to health; and (2) a number of ideas relative to what might be called the art of medicine, or the doctor-patient relationship. This involves a set of principles designed to deal with the emotional forces operative in the production of disease and the return to health.

The Patient and His Environment

Over the past 75 years, medicine has been largely dominated by mechanistic conceptions of disease. This fact is perhaps best illustrated in a consideration of infectious diseases. The term "disease" implies a specific etiology, a specific course, and a specific termination. Our research and treatment efforts have been consistent with this focus. We have neglected to consider the host, and what transpires within the host. Recent work has shown that those diseases fundamentally related to the invasion of an organism from the outside world depend upon the condition of the host invaded⁽¹⁾. This is what is known as the idea of host resistance.

Each individual develops through a complex biological social interaction process. In the process he learns or develops various techniques for maintaining himself in a state of relative constancy with his environment. The environment consists not only of the physical and social world, but the somatic processes active within the body. Adaptive techniques are for the purpose of maintaining equilibrium in spite of a disturbance in the internal or external environment. A disturbance in any part of the system produces disequilibrium and likewise affects the other parts making up the system. Disequilibrium can manifest itself in any one of a number of ways, such as disturbed social behavior, emotional disturbances, psychosomatic ill-

ness, chronic illness, and decreased host resistance. A doctor is one factor in the environment with which the patient interacts. Through his actions, the doctor can aid in the patient's return to equilibrium in his environment, or at times he can cause further disequilibrium.

In line with this thinking, the World Health Organization has defined health not only as the absence of disease, but also as the mental and social well-being of a person. Studies of stress reactions suggest two other parameters to any definition of health or disease. One is the ability to call forth an adaptive reaction in the face of a threatening situation, and the second is the ability to terminate the adaptive or stress reaction when it is no longer necessary⁽²⁾.

Hinkle and Wolff⁽³⁾, in a recent paper, stated that some people experience a greater number of illnesses per unit of time than others. They found that illness tends to involve many organ systems, and to appear in clusters at particular periods of life when the people are having trouble adapting themselves to the world they live in. Weiner and his co-workers⁽⁴⁾ reported a somewhat similar observation involving certain studies in the etiology of duodenal ulcers. Previous to this work, Mirsky⁽⁵⁾ had reported that it is only in people with high serum pepsinogen levels that peptic ulcers develop. Yet not everybody with high serum pepsinogen levels develops peptic ulcers. It is probable that the rate of gastric secretion, which is reflected in the serum pepsinogen level, is related to a hereditary factor. Previous studies in psychosomatic medicine have correlated the development of peptic ulcer with a particular type of personality. Yet we also know that not everybody with this type of personality develops a peptic ulcer.

Weiner and his co-workers obtained serum pepsinogen levels in a group of Army inductees. They carefully screened the inductees for the presence of duodenal ulcer and independently made psychological studies. They then followed the men for the development of active duodenal ulcers.

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They found that neither a high rate of gastric secretion nor a specific type of personality organization is independently responsible for the development of peptic ulcer. They did find, however, that these two parameters, a high serum pepsinogen level and an oral dependent personality, together constitute the essential determinants in the precipitation of peptic ulcer when the person is exposed to a threatening social situation. Here we see the correlation of constitutional and psychological factors, and a threatening social situation.

Mental Health and the Community

It is fairly generally agreed that the number one health problem confronting our country is that of mental illness. A number of recent attempts have been made to estimate the incidence of definable emotional difficulties within a given community. From these reports it is estimated that approximately one-third of any community's citizens have psychiatric symptoms severe enough to require medical treatment⁽⁶⁾. Other data concerning the relationship between psychiatric symptoms and socio-economic status have been compiled. It is reported that severe disturbances are three times as frequent in the lower socio-economic third than in the higher socio-economic third. Yet the likelihood of getting medical treatment was 20 times greater in the upper third than in the lower third⁽⁷⁾.

The type of symptoms manifested by these people also seems to vary with their socio-economic class. The frequency of the anxiety-tension syndrome remains constant, and does not vary with socio-economic status⁽⁷⁾. Disturbances in upper class patients seem to be manifested in symptoms of self-criticism, while those in the lower socio-economic classes tend to manifest somatic symptoms or behavior disorders⁽⁸⁾.

Buell and his associates⁽⁹⁾, in a number of community surveys, found that more than 50 per cent of the health and welfare services available to an entire community are used by a relatively small segment of the population—a hard core of 6 per cent. Add to this the emotional disturbances that result from physical illnesses, plus the fact that emotional factors lower host-resistance, which can lead to heightened susceptibility to accidents, infection and other disease

processes, and one can see the staggering problem that we, as physicians, are confronted with. It leads to the inescapable fact that we must practice psychotherapeutic medicine.

The Nature of Psychotherapy

Psychotherapy can be defined as a planned and organized pattern of action, designed to alleviate a marked, or morbid, emotional state. Now, any treatment has to be based on diagnosis. This means recognizing the etiologic role of emotional factors, as well as the operation of these factors in the patient's relation to the physician. In treating patients, the physician must assume the role of a participant-observer. This means that he must not only listen and look, but also evaluate his own personal emotional reactions to his patient and observe their effect on his treatment. A medical history should include data concerning the current operation of emotional forces as well as psychosocial developmental factors. As a routine part of every examination, the physician must note how his patient perceives, thinks, acts, and feels. This latter is what we psychiatrists call a mental status examination.

The psychotherapeutic approach

In discussing psychotherapy, I do not feel that it is in order to describe specific techniques, except in a broad and general sense. What I believe is important is what might be called a psychotherapeutic attitude. I have just tried to outline this attitude in relation to diagnosis. Each doctor recognizing the emotional forces in his patient's illness has to decide for himself what he can and cannot do, depending on his patient's situation and his own personal interests, skills, and personality. Psychotherapy cannot be taught; it has to be learned through experience. We find the most valuable training technique is a preceptor system, in which each psychotherapist discusses the course of treatment of a particular patient with a consultant or supervisor. This can be done in a group or individually. It is much like surgery as far as training is concerned.

The analogy with surgery is also relevant from the standpoint of treatment. Each physician can and does undertake minor surgery. Each physician can do minor psychotherapy. The role of the psychiatrist

is that of a diagnostic consultant, or of a therapist for the more difficult problems. In general, where unconscious factors have to be brought into the open, it is best to consider treatment by a psychiatrist. There is, however, more to this matter than specific technical maneuvers. I refer to the setting in which any medical treatment occurs, without regard to whether it is medical, surgical or psychiatric, and irrespective of the particular techniques used. For instance, recent studies of the total environment of the psychiatric hospital indicate that factors other than what the doctor does or specific therapy might have a great deal to do with whether or not the patient gets well. We are gradually learning that sometimes we unwittingly do a great deal to keep our patients sick and that factors ordinarily counted as unimportant may play a significant part in recovery.

Elements in the Doctor-Patient Relationship

What transpires in the treatment setting is what I mean by the patient-physician relationship. To understand this, I find the concept of social role a useful one. This means the expected behavior of people occupying a particular status in the social system. Being a patient and being a physician are two separate roles, and we expect different behavior. Sociologists see illness as deviant behavior, by which they mean that the sick person is unable to fulfill one or more of his usual social roles—for example, that of a mother, a wage earner, and the like. Deviant behavior — or, in this context, illness—imposes a strain on the social system which, if excessive, will prevent it from functioning or cause it to break down.

The role of the patient

Parsons⁽⁹⁾ in particular, has studied modern medical practice. The role of the sick person seems to involve four elements:

1. *Exemption from the performance of certain normal social obligations.*

These exemptions are, of course, relative to the nature and severity of the illness. Certain exemptions are legitimate and others are not. The individual is not exempted from roles that he is competent to handle; he should be exempt from roles that he is incompetent to handle. For instance, malingering is not excused, while

on the other hand the sick airplane pilot must not carry on.

2. *Exemption from a certain type of responsibility.* A sick person cannot be expected to get well by an act of will. However, he is not excused from the responsibility of doing all that he can to aid his recovery, provided he has competent medical direction.

3. *Being sick is seen as being undesirable, and the sick person must want to get well.* No one is given the privilege of being sick any longer than necessary.

4. *The sick person is in need of help from people especially qualified to treat illness—that is, physicians.* This need carries with it the obligation to cooperate with the physician.

The physician's role

The role of the physician demands activity which will reverse the pathogenic process of being sick. Again, four elements are involved:

1. *An element which we can call support.* This means to accept the patient as he is and attempt to meet his actual needs. The therapist is not obligated to do everything the patient wants of him or to placate the patient. Here misunderstanding frequently arises. A good doctor-patient relationship is frequently misunderstood as good public relations, or, as someone recently said, "keeping the customer happy." It does not mean this. It means supporting the healthy part of the sick person and meeting his legitimate needs only so long as these needs exist.

2. *The physician is expected to create a permissive situation.* This means that the patient should be free to express wishes, fantasies, and feelings which ordinarily would not be permitted expression in normal social relationships. Action is not permitted. The patient is not allowed to gratify these wishes and fantasies with the physician. We call this "setting limits."

3. *The physician does not reciprocate explicitly or implicitly the wishes and fantasies the patient expresses.* To put it differently, the doctor may not exploit the patient. What is important for doctors to realize is that many of their legitimate functions hold for patients an unconscious significance of both a sexual and an aggressive nature. Likewise the doctor's actions can be either pleasing or threatening, in keep-

ing with the patient's unconscious fantasies and wishes.

4. *The therapist gives or withholds approval.* Usually we do not think of doctors as expressing overt disapproval, but they may withhold positive approval. This can be a powerful coercive or manipulative element.

These elements of the doctor-patient relationship, or their reciprocal roles, were institutionalized or made part of our social system long before the era of modern psychiatry. They constitute what is known as the art of medicine—practiced long before we had any notions of the unconscious or of unconscious motivation. The art of medicine is really the effective utilization of the above four elements of the physician's role.

It is interesting to note that the role of a sick person is much like that of a child, while that of the physician is much like that of the parent. The process of treatment in this context bears many resemblances to the normal socialization of the child. Modern psychiatry has taught us a great deal about the influence of childhood factors in the development of personality. These factors remain operative in each of us, far beyond our awareness, in what we call the unconscious. In sickness, the unconscious wishes and fantasies which are the residue of childhood experience are reactivated and often projected onto the physician. The patient sees himself as the child and the physician as a parent, and he expects the physician to behave as a parent. This is what we call in psychiatry "transference."

Conclusion

In considering the role of the sick person and its exemptions, we can see some of the potential gains a person may acquire through being sick. It is as if the person is cheating, or not playing the game accord-

ing to the rules. Likewise, we as physicians must consider how we, at times, deviate from our prescribed behavior. In situations where the patient or the physician does not behave according to his expected role, it becomes necessary to examine the meaning of either the physician's or the patient's behavior. It is necessary to find out the factors active in the patient or the physician, as a human being, that leads to the deviant behavior. If the physician fulfills his expected role, he will be practicing the art of medicine, or psychotherapy, regardless of the type of patient he is treating or the type of treatment he is rendering.

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It has been said that there were no atheists in foxholes of modern warfare. Similarly, I cannot conceive of atheists in the operating room where a life hangs in the balance, or in the delivery room where the perpetual miracle of birth is evidence.—Rouse, M. O.: Spiritual Allies in Medicine, Texas J. Med. 53:383 (June) 1957.



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Abnormal Lactation

JOHN H. MONROE, M.D.

WINSTON-SALEM

After a review of cases of unusual lactation, the duration of this finding following childbirth in the following instance seems exceptional and worthy of report.

Case Reports

Case 1

A 38 year old white married woman, gravida 1, para 1, was referred to the medical service of the North Carolina Baptist Hospital for evaluation of an increased basal metabolic rate, leg pains, and choking sensation. She was in good health until two months prior to admission when she noted the onset of pruritus of the right lower lip, the right flank, right foot, and right knee, followed by numbness and fleeting pains in these areas and by choking sensations.

The history revealed that the menarche was initiated by oral tablets at the age of 14, with an irregular flow every six weeks to six months afterward. She married at the age of 16, used no contraceptives, and conceived at the age of 20. Pregnancy was uneventful and delivery was spontaneous at term, with no hemorrhage or shock. Thrombophlebitis with swelling developed in the left leg however, requiring decreased activity for approximately six months. She breast-fed the baby with ease for four months, and elected to wean it at that time. Lactation decreased, but minimal bilateral breast secretion continued, and she has not menstruated since delivery 18 years ago. She denies stimulation of the breasts. Libido has been decreased, and nervousness has occasionally been troublesome since delivery. Various hormone preparations of unknown dosage and type have been given orally and intramuscularly in the past, without producing vaginal bleeding or reducing lactation. She has had no hormone therapy for more than five years.

Combined study by the medical, neurology, ophthalmology, and gynecology services revealed these findings:

Gynecology: The patient gave a history of amenorrhea with continuous bilateral lactation for 18 years following childbirth. The uterus was atrophied, and examination of a vaginal smear showed minimal cornification.

Radiology: Roentgen studies disclosed spotty calcification above and within a definitely enlarged sella turcica, with erosion of the posterior clinoids.

Neurology: Knee jerks were diminished bilat-

erally, abdominal reflexes were weak, and the left biceps reflex was decreased. There was an inconstant and unsustained lateral nystagmus to the right. There was normal pressure on lumbar puncture.

Ophthalmology: The peripheral visual fields were intact; a funduscopic examination was negative. Central fields were tested to white, blue, and red objects, without demonstration of defect.

Laboratory: Leukocytosis varied from 12,000 to 21,000 per cubic millimeter, with a normal differential. The sedimentation rate was slightly increased. There was an increase in the cerebral spinal fluid protein, but no cell increase. A serologic test for syphilis was negative and the celloidal gold curve normal. Protein-bound iodine was 6.3, and radioactive iodine uptake was normal. The amount of 17-ketosteroids excreted in the urine was 2.4 mg. per 100 cc.; the blood urea nitrogen was 10 and cholesterol 370. The fasting blood sugar was 60 mg. per 100 cc. The Thorn test showed a decrease of eosinophils from 310 to 322 after an eight-hour infusion of ACTH.

DIAGNOSIS: 1. Probable pituitary chormophobe adenoma
2. Marked anxiety
3. Diffuse neuropathy?

The plan for therapy is to follow this patient in the Outpatient Clinic and to irradiate the pituitary gland if visual field cuts or other neurologic findings indicate. An endometrial biopsy when anxiety is less marked and arrangement for follicle stimulating hormone (FSH) determination will be included in future study.

A similar case was treated with irradiation in 1948:

Case 2

A 24 year old white married woman experienced a normal menarche at the age of 13, with a regular 28-day cycle and average menstrual flow until pregnancy in 1945. Delivery was uneventful at term. Menses did not reappear, and lactation persisted. Multiple controlled estrogen and estrogen-plus-progesterone courses failed to stop lactation, and no uterine bleeding resulted.

Two years postpartum there was a sudden onset of diplopia which persisted for three months then spontaneously regressed, but was followed by persistent left internal strabismus. The basal metabolic rate, glucose tolerance, fasting blood sugar, cerebrospinal fluid analysis and pressure, and hemo-

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were intact, but the central fields showed scotomas. Ophthalmoplegia of the left lateral rectus was marked. Skull films revealed a greatly enlarged sella turcica, with erosion of the posterior clinoids.

Ten months after a course of irradiation to the pituitary gland, the visual fields became completely intact and ocular muscle paresis definitely improved. In the eight years since recovery of visual fields, the patient has been in excellent health, but menses have not returned. Breasts are moderately reduced in size, and lactation is diminished. She reports no breast secretion at present, but does not know when lactation actually ceased.

Comment

The Chiari-Frommel syndrome is defined as prolonged lactation and atrophy of the uterus. In 1855 Chiari first described 2 cases exhibiting these findings, which he attributed to the poor nutrition which was so common in Central Europe at that time. The cases were discussed in a notation under anomaly of size of the uterus⁽¹⁾. In 1882 Frommel published a much more detailed report on puerperal uterine atrophy. He found "Chiari's syndrome" in approximately 1 per cent of obstetric cases. He also was impressed with the poor nutrition of these patients and with the multiple, varied, functional complaints which they presented for treatment. He attributed the etiology to frequent pregnancies, and advised early weaning when hyperinvolution of the uterus was found⁽²⁾.

Cases of Chiari-Frommel syndrome are poorly catalogued, but reviews made in 1935, 1944, and 1946 listed a total of 9 cases, in several of which there were subsequent pregnancies and or resumed menses without cessation of lactation⁽³⁾. A Mayo Clinic report of 78 cases of postpartum amenorrhea encountered over an 18-year period included 13 which were associated with prolonged lactation. From this series Hunt⁽⁴⁾ concluded that the Chiari-Frommel syndrome is not a clinical entity, and that it occurs in postpartum amenorrhea arising from various causes—such as pituitary failure, ovarian failure, and even end-organ failure. Galactorrhea and amenorrhea unrelated to pregnancy have been reported as a separate syndrome occurring in the presence of pituitary tumors⁽⁵⁾. More recent detailed investigation, especially by Albright's group⁽⁶⁾ and by the Brazilian gynecologist Argonz⁽⁷⁾, indicate a correlation of basic physiology with persistent lactation, either spontaneous or following pregnancy.

The persistent lactation under consideration involves excessive galactopoiesis. A neurohumoral mechanism is involved, with the afferent arc being neural from the nipple to the pituitary gland via sympathetic pathways through the hypothalamus. The nipple may be stimulated by infant suckling, by fibrosis in scars from chest surgery, by small chronic abscess formation, by intercostal neuritis, and by persistent digital or oral manipulation⁽⁸⁾.

The humoral efferent arc extends from the pituitary to the breast lobules and duct epithelium. It has not been definitely determined whether the hormone is prolactin A or B, mammogen I or II, or additional hormone complexes. It seems safer, therefore to refer to "lactogenic hormone complex (LHC)" from the anterior lobe, causing secretion of milk, and oxytocic hormone from the posterior lobe, causing ejection of milk as well as uterine effect evidenced in "after-cramps" when breast-feeding, and hyperinvolution of the uterus during lactation. These demonstrations and observations in human beings have been investigated in animal physiology and husbandry⁽⁹⁾. Apparently, estrogen increases LHC production, and progesterone increases LHC release. Adrenocorticotropin and thyrotropin are necessary to good LHC production. The proliferation of breast epithelium stimulated by estrogen allows little secretory activity until a balanced proportion of estrogen plus progesterone initiates pituitary release of LHC⁽¹⁰⁾.

Theoretically and in fact, secretion from the breast can be caused by numerous mechanisms disturbing the interrelationship of the glands of internal secretion. Many cases of galactorrhea have been described in cases of hypothyroidism, hypogonadism, hypoparathyroidism, hypergonadism, low FSH, low and high estrogen, and, especially, in rapidly changing estrogen levels, increased end-organ receptivity of the breasts, and eosinophilic and pre-eosinophilic pituitary adenomas.

Our recent case apparently falls into the latter category, as an enlarged sella turcica was demonstrated by x-ray. Probably the majority of cases of galactorrhea with amenorrhea are associated with excessive pituitary production of some hormone complex, for the following reason: Lactation occurs in acromegaly or known overproduction of eosinophil cells, even when basophil-origin

FSH is not changed; and in chromophobe adenomas which have been shown by Cushing and Cowdry to be pre-eosinophilic⁽¹¹⁾.

In Forbes' cases, 8 of 15 revealed evidence of pituitary tumors, and 3 patients who had biopsies of the pituitary body proved to have chromophobe adenomas. None of these cases showed generalized pituitary failure, and some with elevated 17-ketosteroids and hirsutism were consistent with at least partial pituitary hyperfunction. The pituitary gland is likely to be responsible even when a tumor is not demonstrable. A chromophobe adenoma may produce a lactogenic hormone, or it may interfere with another pituitary hormone which would otherwise oppose or prohibit LHC production. Low FSH consistently found in cases of amenorrhea-galactorrhea indicates interference with pituitary function, and results in secondary low production of estrogen by the ovary. Analyses in normal lactating mothers have shown that FSH is higher than in non-lactating postpartum patients⁽⁶⁾. Low production of estrogen alone is not responsible for lactation, since castration and the menopause do not cause lactation, and some patients producing copious amounts of milk can menstruate regularly and can conceive. Also, administration of estrin will diminish but not stop lactation of long standing.

Studies of cell physiology in animals have shown that peripheral basophilic cells in the upper and lower surfaces of the pituitary produce follicle stimulating hormone⁽¹²⁾. It seems logical, then, that increased pressure in the sella turcica would lead to earlier atrophy of these peripheral cells, which are further from the blood supply. This would explain cases of premenopausal women with pituitary tumors presenting symptoms referable to low gonadotropin, and postmenopausal women with pituitary tumors exhibiting the earlier signs of pituitary tumor in symptoms referable to hypothyroid and hypoadrenal function. Since we have evidence that eosinophilic cells produce lactogenic hormone⁽¹³⁾, eosinophil cell overgrowth would cause basophil pressure atrophy, and eosinophil cell over-secretion would cause neutralization or opposition to basophil cell hormone production—hence galactorrhea and amenorrhea.

Summary and Conclusions

A case of postpartum amenorrhea, persistent lactation, and hyperinvolution of the uterus of 18 years' duration is presented. X-ray and clinical evidence indicate a pituitary tumor.

The Chiari-Frommel syndrome is not a logical diagnosis, since the scant criteria set forth originally are frequently met in cases of amenorrhea and galactorrhea of widely varying etiology.

Galactorrhea is a symptom, and discovery of the cause in an individual case requires detailed study. Excess production of a lactogenic hormone complex by the anterior lobe of the pituitary gland is probably a frequent cause in cases of long standing.

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Full Term Abdominal Pregnancy

Report of a Case

DEBORAH LEARY, M.D.

CHAPEL HILL

A 27 year old Negro farm wife, para 2 gravida 3, was first seen at the North Carolina Memorial Hospital on November 30, 1954, having been referred by her attending physician because of vaginal bleeding.

Past reproductive history revealed that she had had two previous uncomplicated pregnancies terminating in the delivery of living infants.

The past medical history, family history, and systemic review were noncontributory.

First admission

The patient's last menstrual period occurred in May, 1954. The expected date of delivery was February, 1955. In June, 1954, she had noted an episode of vaginal bleeding of seven days' duration. The flow was greater than during a normal period, and was associated with the passage of a few small clots, but was free of pain. She was then well until August, 1954, when she was hospitalized elsewhere for a week because of epigastric pain following meals. This pain has persisted since, without nausea, vomiting, or bowel disturbances. On November 25, 1954, aching lower abdominal pain gradually developed and persisted. At 6:00 P.M. on November 29 she noted the onset of vaginal bleeding, which continued, necessitating the use of three pads up to the time of admission at 4:00 P.M. on November 30. She had not felt the baby move on the day of admission. The pregnancy had been otherwise uneventful, with no evidence of toxemia or other complications, and a total weight gain of 17 pounds.

Physical examination disclosed a well developed and well nourished woman who was in no apparent distress. The blood pressure was 110 systolic, 60 diastolic, the pulse 80, respiration 20, and temperature 98.6. The positive findings were: (1) a

slightly enlarged thyroid gland; (2) a normal-sized heart, with an accentuated and split pulmonic second sound and a grade 2 systolic murmur along the left cardiac border; (3) a gravid abdomen, with the fundus at 4 fingerbreadths below the xiphoid process, rather firm and tense. The fetus was difficult to outline, lying in what was thought to be the right occiput anterior position. The fetal heart was not heard.

Laboratory findings: The hemoglobin was 8.5 to 9.15 Gm. The white blood cell count was 5,000. A urinalysis revealed the specific gravity to be 1.020, albumin 0, sugar 0, sediment negative. A serologic test for test for syphilis was negative. The blood type was found to be group O, Rh positive.

Soft-tissue films taken on admission revealed a fetus estimated at 7 to 7½ months' gestation lying as a breech presentation with the back to the right. The placenta was visualized high on the anterior uterine wall. A routine chest film was negative.

Course in hospital

The patient was placed on complete bed rest. Bleeding, which never became more profuse, ceased. Vital signs remained stable. The fetal heart was never heard. The abdominal pain, which shifted to the right lower quadrant, gradually subsided. Sterile speculum examination revealed a hypertrophied blue cervix with central erosion. Sterile bimanual examination revealed the cervix to be long and closed, and nothing resembling placenta could be palpated through it. The patient was discharged home on hematinics on December 4, to the care of her referring physician, with a tentative diagnosis of death *in utero*, perhaps due to abruption of the placenta, to await the spontaneous onset of labor.

Second admission

The patient was re-admitted at 1:30 P.M. on December 30, with the chief complaint of constant abdominal pain since the preceding night. The pain was of sudden onset in the epigastrium and right upper quadrant, shifting to become generalized. There had been associated anorexia, without nausea or vomiting. Her bowels had moved several times the day before admission, and once on the day of admission. She was seen at home by her referring physician, who felt that she was in early labor with a transverse lie, and referred her to the hospital. She had felt the baby move since her previous discharge, and also on the day of admission.

Physical examination: The patient was drowsy but cooperative, and appeared acutely ill. The temperature was 98.4, blood pressure 120 systolic, 85 diastolic, pulse 100, and respiration 22. The cardiac findings were essentially as before. The abdomen was gravid, with the fundus 4 fingerbreadths below the xiphoid. No uterine contractions were felt. The fetal heart beat, best heard to the left of the umbilicus, was 132. The entire abdomen was somewhat tense and tender, without any localized areas of tenderness, spasm, or rebound tenderness. Both flanks were tender, the right more than the left. The fetus could not be clearly outlined, but appeared to lie in a transverse position. There was nothing presenting over the inlet.

Accessory clinical findings: The hematocrit was 27, hemoglobin 8.6 Gm., white blood cell count 9,600, with 76 polymorphonuclears, 76 lymphocytes, and 6 lymphomonocytes.

There was no evidence of sickling. A urinalysis revealed a specific gravity of 1.016, acetone 4 plus, albumin 0, sugar 0, and sediment negative.

X-rays on admission revealed plate-like atelectasis at both bases, with indistinct diaphragmatic outlines. There was no air below the diaphragm. Barium swallow showed no evidence of hiatus hernia. Abdominal film showed a single fetus in transverse lie, LADA, in high position. Distended bowel could be seen above, posterior to, and on both sides of the fetal location, but there was no evidence of obstruction. It was noted that soft tissue density filled the entire pelvic cavity.

Course in hospital

Intravenous administration of 5 per cent dextrose in water was begun after the patient's return from x-ray. She was allowed nothing by mouth. Sterile pelvic examination at 5:30 P.M. revealed the cervix to be long and closed, admitting only a fingertip beyond the internal os. No unusual soft tissue masses could be felt in the pelvis. What appeared to be a normal lower segment, cystic and fluid filled, could be felt. No fetal parts could be felt. There was no bleeding associated with the examination.

Generalized abdominal pain persisted, distension increased, and respirations rose to 40 while the pulse rate ranged from 90 to 100. The blood pressure remained stable. At 10:30 P.M. a Levin tube was inserted, and about 200 cc. of greenish fluid was obtained. Surgical consultation was obtained. No uterine contractions were observed. Continuous gastric suction and the administration of whole blood were begun. Repeated hemoglobin, white blood count, and urine analysis showed no essential change save for gradual disappearance of the acetone. The tenderness gradually seemed to localize in the right upper quadrant.

It was the consensus of all observers that the patient had suffered an acute peritoneal insult, probably unrelated to the pregnancy, and most likely acute appendicitis or acute cholecystitis with probable rupture. Abdominal pregnancy was considered a possibility; but with intact membranes, a living infant and a high transverse lie, the usually recommended methods of sounding the uterus or resorting to hystero-graphy appeared unduly risky. She was not improving and it was finally decided that abdominal exploration was mandatory.

At 4:00 A.M. on December 31, she was taken to the operating room and under Pentothal-nitrous oxide-cyclopropane anesthesia with Anectine, exploratory laparotomy was begun through a right paramedian incision extending upwards from the level of the umbilicus. As soon as the peritoneum was entered, an odor similar to that of amniotic fluid was noted, and grayish-white flaky fluid was found in the peritoneal cavity. (A culture was taken which grew nonhemolytic *Staphylococcus albus*, coagulase negative). A large fibromuscular sac with a smooth glistening surface was presenting in the wound. This contained the infant

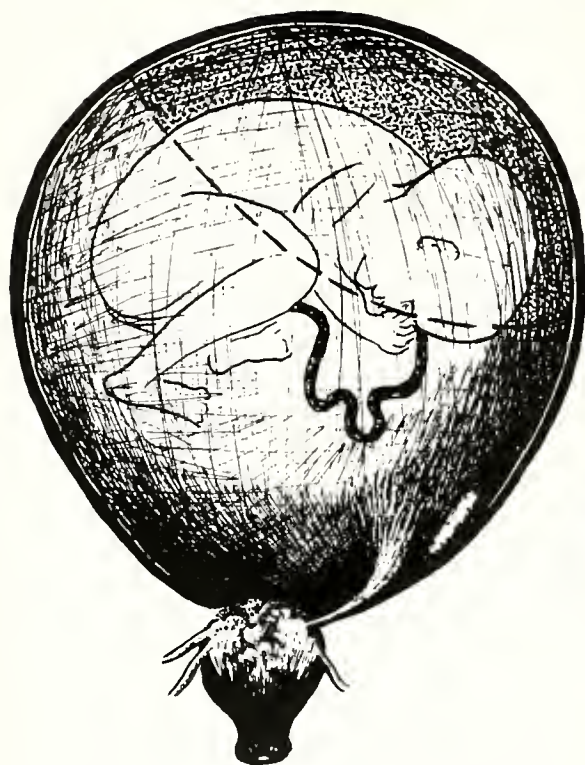


Fig. 1. Drawing of anteroposterior view of the fetus, gestation sac, and uterus.

and resembled a term-sized uterus except that it was covered with venous sinuses, measuring 1.5 to 2 cm. in diameter, coursing in a longitudinal direction. The wall of the sac appeared to be about 1 cm. in thickness. The omentum was attached to the upper pole, with many enormously dilated arterial and venous channels. In the course of manual exploration of the gallbladder and stomach, both of which proved to be intact, one or two of the omental attachments of the sac were pulled loose, and there was extremely free bleeding from the venous channels of the sac, which could not be stopped by suture ligature. The incision was extended both superiorly and inferiorly. A transverse incision was made in what appeared to be a bare area of the sac wall, and a male infant weighing 7 pounds 15 ounces was extracted by the breech. The infant, although somewhat depressed, responded well to resuscitation.

Once the sac was emptied it was possible to determine that it arose at the left cornu of the uterus and was receiving its blood supply from the omentum at one end and the utero-ovarian vessels at the other. The left tube could not be identified anywhere.

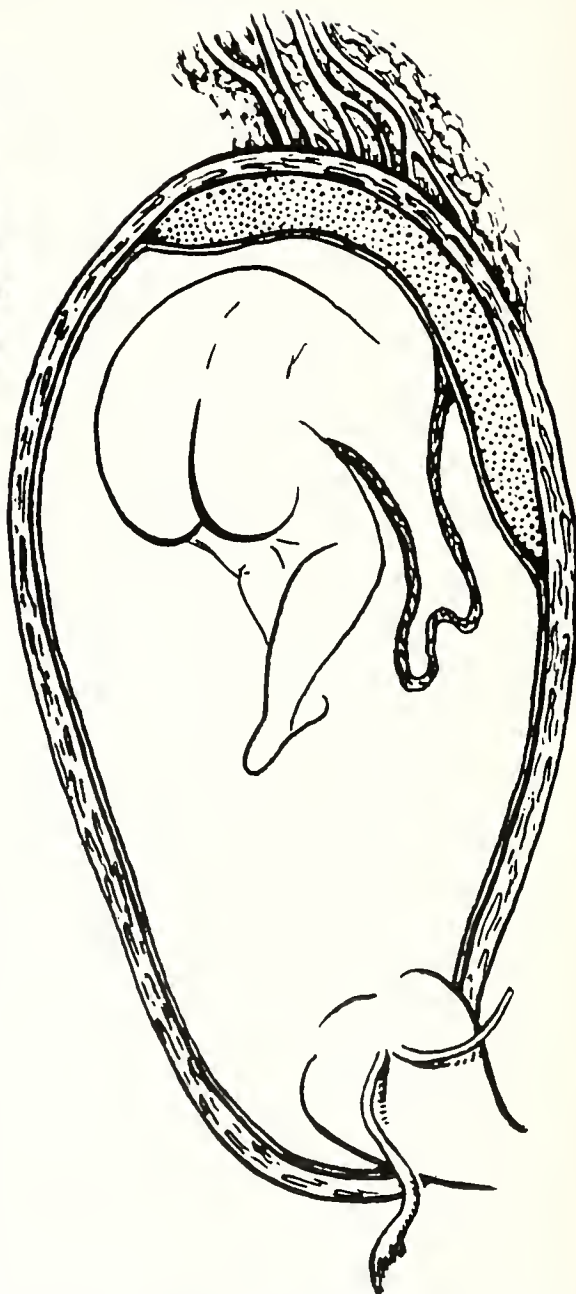


Fig. 2. Drawing of right lateral view of the fetus, gestation sac and uterus.

The left ovary was identified in the wall of the sac. The placenta lay as had been previously described by x-ray, high and anteriorly in the sac wall. There were avascular fibrous adhesions to the lower left anterior abdominal wall, the sigmoid mesentery, and the posterior peritoneum at the pelvic brim. The omental attachments of the sac were transfixed, ligated, and divided. In view of the self-contained nature

of the sac and the continued free bleeding from the cut edges, it was decided to remove rather than pack it. After removal there was still bleeding from the posterior surface of the uterus, the seat of several fibroids which had been attached to the sac wall and one of which appeared to have undergone degeneration. Accordingly, a subtotal hysterectomy was carried out, leaving the right tube and ovary, which were uninvolved, *in situ*. The abdominal wall was then closed in the usual manner except for the use of braided steel wire in the fascia. Blood loss was estimated at 5 litres. Blood replacement was 6 litres. Considering the circumstances, the patient withstood the procedure well and was transferred to the recovery room in satisfactory condition.

Pathology report: "Gross: This specimen consists of a membranous sac which has been opened in two places and can be extended to about 20 cm. diameter. The outer surface is a smooth, shiny membrane with many tags of fibrous adhesions. An area about 18 cm. in diameter in the wall of this cyst is 2 to 4 cm. thick and represents a placenta. The umbilical cord has its origin from the confluence of several large vessels 2 cm. from the margin of the placenta. In the wall of the sac and separated from placenta there are numerous plaques of irregular shape, composed of rubbery, firm tissue which is yellow-grey in color and fairly homogeneous on cut section. An ovary 4 by 2 by 8 cm. is identified enclosed in a peritoneal fold which can be dissected free from the sac proper for a distance of 8 cm. from ovary to point of attachment, at the margin of the placenta. The ovary contains the pale corpus luteum, 1 cm. in diameter. No oviduct is identifiable. On the fetal surface of the placenta are several slightly elevated firm yellowish plaques measuring up to 0.5 cm. in thickness. The villous surface of the placenta faces into a sac containing some residual clotted blood. Villi are present on the external surface of the entire cystic specimen only at the site of surgical incision for removal of the infant from these membranes. It is reported that at operation there was no invasion of viscera by the placenta, but rather an attachment of this entire sac-like structure to the omentum by a fibrous band containing numerous large vessels. This is identifiable on the external surface of the sac at one mar-

gin of the placenta. The umbilical cord is 52 cm. long.

"The accompanying uterine fundus weighs 330 Gm. and measures 10 by 9 by 6 cm. Over the superior surface of the uterus are many tags of fibrous adhesions and evidences of operative hemorrhage. At one cornu three firm nodules, measuring from 1.5 to 3 cm. in diameter, are identifiable and several smaller nodules are palpable within the wall. The myometrium is pinkish-grey and 3.5 cm. thick. The pale endometrium is 6 mm. thick. Several small, firm, white nodules within the thickened myometrium are seen on section.

"*Microscopic:* Sections of the placenta show normal mature chorionic villi except in the grossly pale, firm areas, which are placental infarcts.

"The sac in which the fetus lay consists chiefly of a serosa-covered fibrous tissue, in which there are blood vessels and rare, widely separated strands of smooth muscle. Interior to this is a hyalinized layer in which there is early fibroblastic proliferation, foci of calcification, and shadowy remains of necrotic chorionic villi, with a few viable trophoblast cells just adjacent to the fused chorion and amnion. The finding of scattered smooth muscle cells does little to identify the structure, beyond suggesting the remote possibility of dilated oviduct. Broad ligament could present the same finding. The thicker plaques in this sac contain chorionic villi showing partial to total infarction.

"The wall of the sac into which the villous surface of the placenta presented is similar in structure to the above, except for larger number of vessels, chiefly large, relatively thick-walled veins. No decidual tissue is recognizable in the innermost layer of this sac, there being only a thin hyalinized layer with a few strands of degenerative trophoblast cells and hyalinized villi.

"The uterus has hypertrophied myometrium and endometrium, with decidual reaction and tortuous glands lined by flattened epithelium. Both myomas show minimal calcification in the one and hemorrhage and softening in the other."

Postoperative course: The patient was continued on gastric suction and parenteral fluids for the first three days after operation. Terramycin was given in full doses. Her urinary output was satisfactory. Her

course was febrile, the highest temperature being 101.6 F. on the day of operation and the fourth postoperative day. Chemical studies showed a sharp drop in sodium post-operatively, which was corrected by the administration of normal saline. Lactation was normal. An intravenous pyelogram on the sixth postoperative day showed good concentration of the dye and a normal urinary tract. The postoperative hematocrit was 30 and hemoglobin 9.9. The patient was discharged in good condition on the eighth postoperative day with her infant, also in good condition.

On follow-up examination five weeks later the patient stated that she had been well. The abdominal wound was well healed. The cervical stump revealed a central erosion. Papanicolaou smears were negative. Pelvic examination revealed a normal right ovary, a mobile, though tender stump, and no pelvic masses. She failed to keep a subsequent appointment. Her husband's employer reported by telephone in April, 1957, that she is apparently in good physical condition.

Comment

Frachtman⁽¹⁾, in 1953, reviewed the literature and listed a total of 74 cases of full term tubal pregnancy, including nine instances in which both mother and infant survived. Gustafson, Bowman and Stout⁽²⁾ have reported another case since then. It is our belief that this case represents the eleventh recorded case of a full-term tubal pregnancy with a living mother and living infant. This is an inferential diagnosis, since we were not able to demonstrate ciliated columnar epithelium in the inner lining of the sac. We were, however, able to demonstrate smooth muscle. The left tube could not be identified elsewhere. The left ovary was present in the wall of the sac, but not involved in it. Had it not been for the presence of degenerating fibroids in the fundus uteri, it would have been possible to

manage this pregnancy by salpingectomy, as suggested by McElin and Randall⁽³⁾.

In reviewing the literature it is comforting to note that the correct preoperative diagnosis of this condition in the presence of a living infant has, so far as I have been able to discover, yet to be accomplished. Certain features common to advanced extrauterine gestation were present here, notably a high and abnormal fetal life and a soft-tissue mass in the pelvis demonstrated by x-ray, but the usually mentioned signs of readily palpable fetal parts and an abnormally loud fetal heart were absent. Hysterography and sounding of the uterus—both risky in the presence of a live infant, a transverse lie, and intact membranes—may also be misleading in that on occasion the tubal lumen is patent and the dye may spread upwards around the amnion, and the sound may perforate the softened uterus, resulting in hemorrhage or infection with little diagnostic benefit.

The classic method of management advocated for advanced extrauterine gestation is to leave the placenta *in situ* and close the peritoneal cavity without drainage. When the placenta is implanted upon various viscera, this unquestionably remains the procedure of choice, but in the rare instances such as this one where the placenta lies in a self-contained sac, the blood supply of which can be controlled by ligation and excision, the consensus seems to favor excision. In the case just reported, I do not believe that bleeding could have been properly controlled in any other way.

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"The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration. Whoever chooses this profession assumes the obligation to conduct himself in accord with its ideals"—Principles of Medical Ethics of the American Medical Association, Chapter 1, Section 1.

JULY, 1957

LIGHT ON THE HIGH COST OF DRUGS

A frequent complaint made by patients and their families is that the cost of so many drugs—especially new ones—is so high. A recent news release from a pharmaceutical firm helps explain why new remedies are so expensive. A 15-month clinical trial of an oral anti-diabetic remedy had disclosed side reactions in 5 per cent of the patients taking it for the control of diabetes. For that reason its use is suspended pending further investigation. The news release stated: "We deeply regret that this compound does not meet the rigid requirements for a drug that must be taken throughout life. At the same time, we are grateful that the study of carbutamide was

broad enough and thorough enough to uncover its limitations."

If every new remedy were marketed without any effort to discover whether it is effective and safe, and without the necessity of long and patient and expensive research, the cost of drugs would be much less. Only too often a long period of research ends in a blind trail. Some years ago another pharmaceutical firm had invested more than a million dollars preparing to produce antitoxin against pneumococcus pneumonia, when the discovery of the sulfonamides and later of penicillin made the antitoxin obsolete.

It is good to know that our pharmaceutical friends are intellectually honest enough to censor their own products, and to do their best to protect the ultimate consumer—the patient.

* * *

BENNY'S MEDICAL BILL

Many years ago a distinguished medical man was asked by a younger colleague, "When is the best time to present the family with a bill for professional services?" The reply was: "Before the tears of gratitude are dry on their cheeks."

In the now famous case of young Benny Hooper, the tears of gratitude had probably dried before the parents received the \$1,500 bill from the attending physician for services rendered. If not, they were dried immediately afterward.

It is natural to assume that the doctor's charges were for his dual services as an anesthesiologist (when he administered oxygen while Benny was in the well) and as an internist (when he attended the boy through the pneumonia that followed his exposure). Even for this double duty, \$1,500 seems a large fee for a young couple with the small income that Benny's parents reported. It is fair to the doctor to record that the Suffolk County Mediation Committee found that when he made the charge, "he was under the mistaken impression that a considerable sum of money earmarked for medical purposes had been received by the Hoopers."

There is some reason, however, to question the statement made by Dr. Hamilton, chairman of the American Medical Association Board of Trustees that "not one doctor in a thousand would have charged a fee." "The laborer is worthy of his hire,"

and Benny's doctor was entitled to some compensation for his time and professional skill. Had Dr. Hamilton said, "such a fee," his statement would have been quite correct. A bill in keeping with the family's financial circumstances would probably have been paid without question—but evidently that profit motive was strong enough to interfere with the doctor's perspective.

The best part of the story is the part played by the Suffolk County Mediation Committee. When the Hoopers protested against the bill, the doctors advised them to take their case to the mediation committee, and agreed to abide by the committee's ruling. It is unfortunate for the whole medical profession that they did not do this at first, instead of giving the story to the press. It is good to know, however, that the mediation committee agreed that the charge was excessive, that it had been made under the mistaken impression already referred to, and that no bill should be rendered. The doctor readily accepted the ruling, and he and the Hoopers are still friends, and have agreed that "any money contributions already sent by well-wishers, if earmarked for Benny's medical expenses, would be turned over to the National Foundation for Infantile Paralysis."

* * *

THE MEDICAL LUNATIC FRINGE

Dr. Gerald Johnson's latest book—and one of his best—"The Lunatic Fringe," gets its name from Theodore Roosevelt's famous phrase, used to describe those whose views differed widely from the conventional thinking of their day. Dr. Johnson discusses briefly a baker's dozen of people of the past with ideas so unconventional that they were looked upon as candidates for the lunatic fringe of society. Their views were accepted many years later, and some of them have been given belated recognition as prophets.

Dr. Johnson did not include any members of the medical profession — unless selling patent medicines might have entitled the Clafin sisters to be so classed. There have, however, been many doctors who were so far in advance of their generation that they might well be included in a medical lunatic fringe. The tercentary of William Harvey's death on June 3 calls to mind that it was many years after his monumental discovery before his explanation of the circu-

lation of the blood was accepted instead of Galen's antiquated theory.

Another medical lunatic fringe member was the brilliant young French surgeon, Melier, who in 1827 described appendicitis as a clinical entity nearly 60 years before Reginald Fitz published his classical paper on the subject.

The tragic story of Semmelweiss and his efforts to convince the leaders of his day that childbed fever was carried by the unclean hands of obstetricians is too well known to repeat in detail. Dr. Oliver Wendell Holmes also was far ahead of his generation in proclaiming this doctrine.

Louis Pasteur was so far ahead of his generation that many of his colleagues would not accept his ideas until they were forced to do so. He was more fortunate than many other pioneers, living long enough to see most of his brilliant discoveries generally accepted. Now he is generally regarded as the father of modern medicine.

Other examples of doctors who were far in advance of their time are Ambrose Paré, who treated wounds with soothing applications instead of boiling oil; Jenner, who learned to vaccinate against smallpox; Marion Sims, the father of modern gynecology, who spent years in perfecting a successful operation for vesicovaginal fistula; and Sir James MacKenzie, with his classic studies of cardiac irregularities. Even within comparatively recent times, George Minot was considered as mildly obsessed with the idea of curing pernicious anemia by eating liver.

Examples might be multiplied; but these are enough to show that doctors, even more than politicians, have often paid the price for being in the vanguard of progress.

* * *

APT ALLITERATION'S ARTFUL AID

The ingenuity of headline writers is a perpetual source of wonder to newspaper readers. They must compress into rigid space limits eye-catching titles for the stories that follow. A favorite device is the use of alliteration. An example of the absurd lengths to which this may be carried was seen during the A.M.A. meeting in New York in one of the daily tabloids. A dramatic account of the fines imposed upon the six New York Yankees for their Copacabana brawl bore the headline, in box car type, "SINNING SIX SO A K E D SIX GRAND FOR COPA CAPER."

President's Message

ANOTHER THIRD PARTY?

When we think of third party interference we usually are concerned with those agencies which tend to alter the physician's freedom to practice his profession as an individual, to disturb the patient-physician relationship, or to socialize medicine.

Today I am concerned with another problem which is in reality a kind of third party interference. I am referring to the ever increasing drive on the part of certain nationally known drug manufacturers to push the sales of their products. Where formerly ethical drug houses limited their advertising to physicians, they are now seeing to it that the public is made aware of their products, not only by direct advertising, but also by more subtle means.

In an address before the Conference of Presidents and other officers of State Medical Associations in New York on June 2, 1957, Congressman Oren Harris, of Arkansas, chairman of the Interstate and Foreign Commerce Committee, suggested that drug and pharmaceutical firms are becoming a third party agency. Mr. Harris stated that his committee had received a number of interesting communications from physicians pointing out the increasing amount of pharmaceutical advertising which is addressed directly to the public. Of course, this advertising can have but one objective: to create a public demand for drug products, so that people will request prescriptions for these items from their physicians. The public is now well aware of tranquilizers and sedatives—in fact, too much so for the general good.

I should like to call your attention to two articles which have recently appeared in popular magazines. The June 10 issue of *Life* contains an article entitled "Drugs on the Market." Although very well written, to my mind this is definitely propaganda designed to impress the public with the merits of the products of a certain drug firm. In the May issue of *Fortune* is an excellent article on tranquilizing drugs. While attending the recent meeting of the American Medical Association, I heard it referred to by a member of a panel of physicians as being as well written as if one of them had prepared it.

The second article mentioned the possible dangers of these drugs and commented on the tremendous volume of sales. That these drugs are of great value no one can deny. The sad part of the matter, however, is that probably half of the people who take them do not even need tranquilizing. One authority has stated that people in general would be better off not to be tranquilized, and that a certain amount of anxiety is necessary to accomplish our daily work. I remember that during my early years of practice I mentioned to an older physician that I frequently worried about my patients. He replied, "I would not want any doctor looking after me who did not worry about his patients."

Why is there more anxiety now? We never had it better. The increase in heart disease is attributed to the stress and strain of modern life. Is this really a fact or is the increase only relative, caused by the fact that people are living longer and hence reaching the bracket in which degenerative diseases are more apt to occur? Perhaps the strain of competition and the chase after the almighty dollar are to blame. The early pioneers had plenty to be anxious about. They had a terrific struggle for existence, and never left home without fear of being killed by Indians.

Until the present era few hypnotic drugs were used. Now sleeping pills have become almost a by-word, and are entirely too easily obtained.

According to Francis Bellow in *Fortune* magazine, tranquilizers retailed last year at an estimated 125 million dollars. This year they may reach 175 million.

The drug industry has become highly competitive, and whenever a new preparation is successful, we are besieged by detail men, each of whom has a "me too" or a "better than" product. That our national drug firms have been of great service to the profession and to the public no one can deny. Nevertheless, if the present trend continues, we may have a different kind of third party with which to contend.

Edward W. Schoenheit, M.D.

BULLETIN BOARD

COMING MEETINGS

New Hanover County Medical Symposium — Wrightsville Beach, August 9.

Postgraduate Medical Cruises: Duke University School of Medicine—embarking from New York, August 20; Jefferson Medical College—embarking from Wilmington, November 9; University of Maryland School of Medicine—embarking from Wilmington, November 30.

North Carolina Heart Association, Annual Meeting—Barringer Hotel, Charlotte, September 14-15.

American Medical Association Public Relations Institute—Drake Hotel, Chicago, August 29-31.

Institute of Industrial Health, course in radiation for physicians and surgeons—University of Cincinnati, September 9-15.

American College of Gastroenterology, postgraduate course—The Somerset, Boston, October 24-26.

Association of Military Surgeons, Sixty-Fourth Annual Meeting—Washington, D. C., October 28-30.

Southeastern Allergy Association Annual Meeting—Fort Sumter, Charleston, South Carolina, November 1-2.

Pan Pacific Surgeons Association — Honolulu, Hawaii, November 14-22.

NEWS NOTES FROM THE DUKE UNIVERSITY SCHOOL OF MEDICINE

Dean W. C. Davison of the Duke University Medical School has been named a member-at-large of the Educational Council for Foreign Medical Graduates.

Dean Davison will represent the U.S. Defense Department on the Council. He is currently a member of the Executive Reserve in the office of the Assistant Secretary of Defense (Health and Medical).

The Educational Council for Foreign Medical Graduates is sponsored jointly by the American Hospital Association, American Medical Association, Association of American Medical Colleges, and the Federation of State Medical Boards of the United States.

The Council was established to provide better opportunities for foreign medical graduates to study as interns or residents in American hospitals. Present plans also call for a system of evaluating the foreign graduate's medical training to determine whether or not he can benefit from further training in the United States.

Robert S. Salisbury and Lewis W. Sykes have been appointed assistant directors of Duke Hospital's Out-Patient Department, according to an announcement by Hospital Superintendent F. Ross Porter.

Both positions have been created as part of current expansion of the Out-Patient Department,

which is scheduled to occupy new quarters this summer in a major addition now nearing completion at Duke Hospital.

Salisbury's duties will center around business management of the medical divisions of the Out-Patient Department, Porter said, while Sykes will have comparable duties in the surgical divisions. Both appointments are effective immediately.

Salisbury was associated with the U. S. Public Health Service as an epidemiological investigator stationed in Raleigh before coming to Duke. He received his M.A. from Columbia University and did further graduate work at the University of North Carolina before joining the U. S. Public Health Service last year.

Sykes completed a year of graduate work in business administration at the University of North Carolina in June.

* * *

A five-day Regional Institute on Psychiatric Rehabilitation, first of its kind in the Southeast, was held recently at Duke University. Dr. Hans Lowenbach, of the Department of Psychiatry, was director.

The pilot institute was conducted by the Duke School of Medicine under auspices of the Department of Health, Education and Welfare, U. S. Public Health Service. Twenty-seven counselors in the Vocational Rehabilitation Departments of eight states and Puerto Rico attended. The purpose of the meeting was to study how best to help people who have had mental or emotional illness get back into normal productive activities.

* * *

Duke University medical researchers, working under a grant of \$133,500, have begun studying the possibility of a link between anesthesia given at childbirth and afflictions such as cerebral palsy.

Dr. R. Frederick Becker of the Department of Anatomy is principal investigator for the project. The three-year field investigating grant came from the National Institutes of Health, U. S. Public Health Service.

Dr. Becker and his associates are seeking an answer to the question: Will oversaturation of a pregnant mother at the time of birth impair the physical and mental development of her offspring?

Evidence now exists that lack of oxygen in animal offspring during birth produces brain damage similar to that seen in a cerebral palsied child, Dr. Becker points out. Oversaturation can cause such an oxygen lack. Also, Dr. Becker says, there is a possibility that overdoses of anesthetics can produce toxic effects in addition to upsetting circulatory and respiratory patterns. Still another problem that interests the Duke research team is the effects of indiscriminate use of modern tranquilizers upon development of the unborn child.

Dr. Becker, who joined the Duke medical faculty in 1951, is a member of the American Academy of Neurology, American Association of Anatomists, and other professional societies. He taught at

Jefferson Medical College, the University of Washington Medical School and Northwestern University Medical School before coming to Duke.

* * *

Expanded facilities for diagnostic tests and research in blood diseases are now available in a new Hematology Laboratory at Duke Hospital, it was announced recently.

Housed in a second-floor addition to the Hospital, the laboratory was built and equipped at a cost of some \$72,000. Half of this amount consists of Hill-Burton funds administered by the North Carolina Medical Care Commission, while the other half was provided by private donors.

The laboratory was in full operation on June 8, when the Southeastern Cooperative Cancer Chemotherapy Study Group met there for a conference on blood diseases.

Dr. R. Wayne Rundles, director of the laboratory, said the new facilities are geared to handle diagnostic tests and other laboratory procedures for some 60 patients per week. He explained that the laboratory makes possible a more intensive research program on the role of chemicals in controlling leukemia, tumors, Hodgkin's disease, chronic anemias, and other blood ailments.

Delegates to the Cancer Chemotherapy Study Group which met in the Duke laboratory last month reviewed a number of blood disease cases that have been treated and studied in various hospitals. Dr. Rundles is chairman of the group, which includes doctors from nine medical centers over the nation and a team of biostatisticians from the University of North Carolina.

One of five such organizations sponsored by the U. S. Public Health Service, the Study Group was established this year to carry out cooperative studies in chemical therapy for cancer. Currently, the scientists are investigating the effects of two chemicals, Myleran and Chlorambucil, on chronic leukemias and malignant tumors.

Institutions represented in the Study Group are the University of Mississippi, Medical College of Alabama, University of North Carolina, Medical College of Virginia, University of Miami, Florida, Washington University, St. Louis, Missouri, Emory University, University of Kansas, and Duke University.

* * *

Duke University radiologists will soon begin x-raying life-size manikins to find out exactly how much radiation is absorbed by the human body during various x-ray procedures.

The "x-ray mapping" project will be conducted in the Duke Medical School's Radiology Department under provisions of a \$34,000 grant from the National Cancer Institute, U. S. Public Health Service. Principal investigators will be Dr. George J. Baylin, professor of radiology, and Aaron P. Sanders, director of the Duke Medical School Isotope Laboratory.

Dr. Baylin said that the study will "seek to determine how much radiation various parts of the body receive during a given diagnostic or therapeutic procedure." This information will make possible the establishment of more accurate x-ray tolerance guides, thus insuring a greater safety margin for patients who must be exposed to large doses of radiation.

* * *

Dr. Bayard Carter, chairman of the Duke University Medical School's obstetrics-gynecology department, presided over the Seventh American Congress on Maternal Care, which opened in Chicago on July 8.

The five-day meeting was sponsored by the American Committee on Maternal Welfare. Attending were more than 3,000 obstetricians, gynecologists, anesthetists, nutritionists, pediatricians, social workers and others concerned with maternal care from over the United States.

Dr. Carter, who is currently president of the American Association of Obstetricians and Gynecologists, served as general chairman for the entire meeting. Also, he spoke on "Concepts of Complete Maternal Care," "A Look Ahead in the Teaching of Obstetrics," and "Future Patterns for Complete Maternity Care in the United States."

Dr. Roy Parker, associate professor of obstetrics and gynecology at Duke, spoke on "Obstetrical Shock" and "Renal Failure." C. P. Jones, Duke bacteriologist, discussed "The Use of Antibiotics" and "Urinary Tract Infections."

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

The University of North Carolina will offer a four-year course in physical therapy beginning this fall. Students who have already completed two years in an accredited college or university however, may be able to go into the third year of the course in September.

The course is being offered by the UNC School of Medicine in conjunction with the General College of the University. This is a new educational program at UNC and represents another achievement in the efforts of the School of Medicine to meet the broad health needs of the state.

The course is designed to be completed in four years, with one summer session of clinical work. Upon completion of the course, a student will be awarded a degree of bachelor of science in physical therapy. This will be the only course of its kind in this state that leads to a college or university degree.

The curriculum is designed to conform to the requirements in physical therapy as established by the Council on Medical Education and Hospitals of the American Medical Association.

Persons interested in getting additional information on the new course may write the Department

of Physical Therapy of North Carolina Memorial Hospital at UNC or the UNC Admissions Office.

Both men and women are eligible for the new program, which will be under the direction of Margaret Moore, chief of the Department of Physical Therapy at Memorial Hospital.

* * * *

Dr. John B. Graham of the University of North Carolina School of Medicine has been granted \$110,975 for a five-year study of the inheritance of hemophilia and similar bleeding diseases.

Hemophilia is a hereditary disease occurring only in males but transmitted by females.

The grant, effective immediately, comes from the United States Public Health Service.

Dr. Graham is an associate professor in the School's Department of Pathology.

The purpose of the study is to acquire new knowledge in the fields of blood clotting by learning how the diseases are transmitted. Also, a number of young pathologists, medical students, and investigators will be trained in the experimental methods of both blood coagulation and family studies. These plans will be accomplished by making a joint study of the blood clotting problems and how patients who are hemophiliacs have inherited the disease.

Dr. Graham has been engaged in this field of research for nine years. He is completing this year a five-year project on certain aspects of blood coagulation which has been supported by the United States Public Health Service.

In 1949 he was named a Markle scholar and given a grant of \$30,000 from the Markle Foundation. This is considered one of the highest honors that can be bestowed on a young man in the field of academic medicine.

Dr. Graham's laboratory handles all blood clotting problems at North Carolina Memorial Hospital.

* * * *

Dr. James C. Andrews, professor of biochemistry and nutrition, was honored recently by the faculty of the University of North Carolina School of Medicine.

Dr. Andrews, who is retiring at the end of this academic year, was presented a silver pitcher by his colleagues. The faculty also adopted a resolution of appreciation.

* * * *

The Social Research Section of the Division of Health Affairs of the University of North Carolina has received a grant of \$28,000 from the Commonwealth Fund, according to an announcement made recently by Dr. Henry T. Clark, Jr., administrator of the Division of Health Affairs.

The grant is for continued support of the program of social research and training in health and the health professions being carried on by the Social Research Section under the direction of Dr. Henry L. Smith.

The Social Research Section of the Division of

Health Affairs is jointly sponsored by the Institute for Research in Social Science. During the past five years it has developed a program of research and training relationships between social science and the health field. The program provides special training to social science graduate students for research and service in the health field. Such training is part of their graduate degree work. Research projects are developed in areas of practical concern to health units of the Division of Health Affairs.

* * * *

Dr. Judson Van Wyk of the University of North Carolina School of Medicine has received a grant from the United Medical Research Foundation to study the excretion of certain hormones before and after the pituitary stalk is cut. Dr. Van Dyke is assistant professor of pediatrics in the Department of Pediatrics.

It has been known for many years that the sex hormones may have an adverse effect on the course of certain types of cancer. These hormones, which are manufactured in the sex glands and adrenal glands, are under the control of the pituitary body. There is increasing reason to believe that all endocrine glands are controlled by centers in the brain which send messages to the pituitary body, or so-called "master gland," by way of the pituitary stalk. When this stalk is cut, the function of the target glands is altered.

Dr. Gordon Dugger of the Department of Neurosurgery has been studying the effect of pituitary stalk section on patients with certain types of cancer.

These studies by Dr. Van Wyk are part of a continuing investigation being carried out in the pediatric endocrinology laboratory to determine the role of hormones in normal and abnormal growth patterns.

* * * *

Delegates of the Tri-Sigma National Social Sorority, who met at the University of North Carolina, recently toured Memorial Hospital to inspect the Pediatrics Ward. This past December an intercommunication system was donated by the sorority to the children's section of the hospital.

The system was paid for by money from the Robbie Page Memorial Fund, which was established with contributions made by chapter members. Robbie Page was the son of Mr. and Mrs. Robertson Page of Douglaston, New York. He contracted polio in 1951 and died two weeks later from respiratory polio. Mrs. Page was national president of the sorority at the time.

Although no chapter of the sorority is located at the University of North Carolina, Miss Margaret Moore, chief of the Memorial Hospital's Department of Physical Therapy, is a member of the organization and acts as liaison between the sorority and the hospital.

Miss Mona Schaper will replace Kathy Pritchard as Coordinator of Rehabilitation Activities in Pediatric Service at Memorial Hospital in Chapel Hill. Mrs. Pritchard will join her husband at the National Institute of Health in Bethesda, Maryland, where he is conducting research in surgical neurology.

Mrs. Pritchard came to Memorial Hospital a year and a half ago to set up a program of social, dietary, emotional or physical therapeutic rehabilitation for the children in the pediatrics ward. Since her arrival, she has established a play room for the infants and recruited a staff of volunteers from the women's organizations of Chapel Hill.

Her successor, Miss Schaper, has been an instructor at Iowa State College in Child Department for the past three years.

Miss Schaper assumed her duties on July 1.

* * * *

A two-day symposium on the subject of rheumatic fever and congenital heart disease was held at North Carolina Memorial Hospital recently, under the sponsorship of the Crippled Children's Section of the State Board of Health.

The meeting was attended by pediatricians, pediatric nurses, medical and social workers, members of health and welfare departments, and staff of voluntary health agencies throughout North Carolina.

Physicians taking part in the discussions included Dr. Ruth Whittemore, associate clinical professor of pediatrics at Yale and attending pediatrician at New Haven Hospital; Dr. Rowena Hall, Wilmington pediatrician; Dr. Robert L. Vann, Bowman Gray School of Medicine; Dr. H. J. Harris, UNC School of Medicine; Dr. Edward P. Bendow, Greensboro pediatrician and president of the North Carolina Heart Association; Dr. W. P. Richardson, UNC School of Medicine; Dr. Ernest Craige, chief of cardiology, UNC School of Medicine; Dr. Paul Sanger, Charlotte heart surgeon; Dr. Jerome Harris, chief of Pediatrics at Duke and chairman of the North Carolina Heart Association's Clinics Committee; Dr. E. T. Beddingfield of Stantonsburg; Dr. B. H. Hartman of Asheville; and Dr. F. B. Haar of Greenville.

POSTGRADUATE MEDICAL CRUISES

An important announcement has been made in New York concerning cruises to be made this fall, by three medical schools, one of which is located in North Carolina. While the North Carolina school will use New York as its port of embarkation, the other two, located outside the State, will use Wilmington. All three cruises will be made on board the *M. S. Stockholm*, a ship which has become a familiar sight in North Carolina ports. The Allen Travel Service, Inc., 550 Fifth Avenue, New York 36, will conduct all three cruises.

As announced previously, the Duke University Medical cruise will begin at New York August 20 and will last 19 days. Foreign cities visited will be: Dublin, Greenock, Trossachs, Edinburgh, Bergen, Oslo, Stockholm, and Copenhagen.

The first cruise out of Wilmington will be sponsored by the Jefferson Medical College of Philadelphia. The *Stockholm* will sail November 9, bound for Havana, Cap Haitien, San Juan, Guadeloupe, Antigua, and St. Thomas. This cruise will last for 13 days.

The second cruise out of Wilmington will be sponsored by the University of Maryland School of Medicine. It will begin November 30 and last for six days. Cities to be visited on this cruise will be Havana and Nassau. Eminent specialists from the three schools will comprise the medical faculties. The medical seminars will constitute from 15 to 30 hours of acceptable postgraduate requirements.

The cost of the Duke cruise will begin at \$875. Accommodation for the Caribbean cruise, which will originate at Wilmington, may be had from \$295 up, while the six-day Havana-Nassau cruise will cost from \$125 up. H. H. Allen, president of the Allen Travel Service, Inc., announced that bookings already have begun and suggested that those who want the best accommodations make their reservations early. Those who would like to receive literature before making up their minds should address the Allen Travel Service, Inc., 550 Fifth Avenue, New York 36, New York.

NEW HANOVER COUNTY MEDICAL SYMPOSIUM

The New Hanover County Medical Society will hold its eleventh annual Medical Symposium at Wrightsville Beach on Friday, August 9.

Speakers will be: Drs. Robert Phelps Barden, associate professor of radiology, University of Pennsylvania, Philadelphia; G. Watson James III, associate professor of medicine, Medical College of Virginia, Richmond; Jacob Handelsman, associate professor of surgery, Johns Hospital School of Medicine, Baltimore; Alan F. Guttmacher, chief of obstetrics, Mount Sinai Hospital New York City; Philip A. Tumulty, associate professor of medicine, Johns Hopkins School of Medicine, Baltimore.

This symposium is approved by the American Academy of General Practice for postgraduate training credit. There is no registration fee.

There will be a Ladies' Dutch Luncheon at 1:00 p.m., Eastern Daylight Saving Time, and a social hour and dinner for doctors and their wives at Lumina Ballroom in the evening.

A number of hotels and cottages at Wrightsville Beach will accept reservations for this meeting, but reservations should be made as early as possible.

FIRST DISTRICT MEDICAL SOCIETY

Senior members of the First District Medical Society were honored at the second quarterly meeting of the society held in Edenton on May 29. Physicians included in the honored group, all of whom had been in practice 46 years or longer, were Drs. T. W. Blanchard, Hobbsville; J. A. Powell, Edenton; W. A. Hoggard, Hertford; P. H. Mitchell, Ahoskie; Q. E. Cooke, Sr., Rich Square; and Isaiah Fearing, Elizabeth City. Those in attendance (Drs. Blanchard, Ward, Mitchell, Cooke, and Hoggard) were recognized by the presiding officer, Dr. A. Y. Eagles, and invited to give reminiscences of their years in practice. Each was presented with a small token of appreciation from the society for their years of service to the medical profession.

Dr. John Robert Lowery of Salisbury, who has been a member of the 50-year club of the State Society for several years, was guest speaker for the occasion. He told of the changes in medical practice during the past half-century, with particular emphasis on the changing economic pattern of medical practice as well as on the great advances in physical equipment.

It was announced that the third quarterly meeting would be held at Nags Head on Wednesday, August 28, probably at the Carolinian Hotel. Mr. Edward Harding, nationally known speaker of the Knife and Fork Society, has already been engaged as the after-dinner speaker, and plans are under way for the scientific meeting in the afternoon.

A minute of silent prayer was observed in memory of Dr. C. S. Credie of Ahoskie, who departed this life on April 3, 1957.

NEWS NOTES

Dr. J. A. Shaw, Dr. W. H. Breeden, and Dr. R. T. Kelly, Jr., have announced the association of Dr. W. C. Powell in the practice of pediatrics, The Children's Clinic, Fayetteville.

* * *

Dr. Benjamin F. Huntley has opened his office for the practice of internal medicine at 205 South Hawthorne Road, Winston-Salem.

* * *

Dr. Howard M. Starling has announced the removal of his offices for the practice of general surgery to suite 219, Professional Building, 2240 Cloverdale Avenue, Winston-Salem.

* * *

Dr. Richard R. Glenn has opened his office for the practice of pediatrics at the Stratford Medical Center, South Stratford Road, Winston-Salem.

* * *

Dr. William H. Patton, Jr., has announced the association of Dr. Hugh C. Hemmings in the practice of pediatrics at 305 College Street, Morganton.

* * *

Dr. John W. Deyton has opened offices at Morris Memorial Hospital, Milton, West Virginia. His practice will be limited to physical medicine and rehabilitation.

* * *

Dr. C. Hege Kapp of Winston-Salem received his certificate of fellowship in the American College of Chest Physicians at the Convention of the College held in June.

NEWS NOTES FROM THE AMERICAN MEDICAL ASSOCIATION

Endorse Principle of Periodic Health Appraisal of Children

A new program endorsing periodic health appraisal for children sponsored by the National Congress of Parents and Teachers has won support of the American Medical Association's Council on Medical Service. At a recent meeting the Council voted to approve the following resolution: "The Committee on Maternal and Child Care of the Council on Medical Service, A.M.A., reaffirms its approval of the principle of continuous health supervision of children from birth through their school experience rather than only a program of a single appraisal on school entrance. It also recommends that, where possible, this should be done by the physician and dentist who normally serve that child and family, preferably his personal physician and dentist. The Committee welcomes the support of the National Congress of Parents and Teachers."

A.M.A. Studies Chemical Laws

A hodge-podge of state and federal laws regulating the labeling of hazardous chemicals and the need for a uniform chemical law recently were revealed by an American Medical Association study. Sponsored jointly by the A.M.A.'s Committee on Toxicology and Law Department, the study was made in preparation for drafting a model chemical labeling law. A conference of interested representatives of government, industry, and medicine will be called this fall to draft a model law which then can be submitted to legislative bodies.

The proposed legislation is intended to reduce careless and ignorant handling of potentially harmful products in and around the home, small businesses, and other areas where control of over-exposure to chemicals is not as efficient as in the manufacturing process. This law will require informative labeling, including listing of possibly harmful ingredients, their potentialities for danger, directions for safe use, and first-aid instructions.

A.M.A. Issues New Guides on Voluntary Agencies

A new "Guides to Relationships Between Medical Societies and Voluntary Health Agencies" has been published by the American Medical Association. Prepared by the Committee on Relationships Between Medicine and Allied Health

Agencies, the booklet points up the nature of voluntary health agencies, the questions that need to be answered in evaluating such agencies, the medical society's obligations to voluntary agencies, and the voluntary agency's obligations to the medical society.

Copies of the "Guide" may be secured (after August 1) from the Council on Medical Service.

Film Describes Role of Radiologist on Medical Team

A new color motion picture dedicated to the radiologist—a physician who specializes in the use of x-rays, radium, and radioactive materials in the diagnosis and treatment of diseases—has been added to A.M.A.'s Film Library. "First A Physician" tells the dramatic story of what a radiologist is, what he does, and how he serves patients. In this 27-minute film, you'll see the warm, human story of the home and professional life of William Phillips, M.D. You'll learn about the many ways the radiologist uses x-ray in diagnosis and therapy. You'll watch the doctor apply his special knowledge to meet critical situations. The film was produced by E. I. du Pont de Nemours & Co., Inc. in cooperation with the American College of Radiology.

Medical societies may arrange for bookings through the Film Library. The film will be particularly suitable for school, club, and other public gatherings.

STUDENT MEDICAL ASSOCIATION

A new position—that of public relations director—has been created by the Student American Medical Association, and William (Bill) Barr has been selected to fill it.

Announcement of the expansion program step by the 50,000-member organization with headquarters at 510 North Dearborn Street, Chicago, was made by Russell F. Staudacher, executive secretary.

Staudacher said Barr also would be managing editor of the organization's publication, *The New Physician*, and director of its Foundation program. *The New Physician* (circ. 52,106) is the only national monthly magazine speaking officially for medical students, interns, and residents; the Foundation is designed to provide loans to medical students throughout the United States on a self-perpetuating basis.

AMERICAN UROLOGICAL ASSOCIATION

The American Urological Association offers an annual award of \$1000 (first prize of \$500, second prize \$300 and third prize \$200) for essays on the result of some clinical or laboratory research in urology. Competition shall be limited to urologists who have been graduated not more than 10 years, and to hospital interns and residents doing research work in urology.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Roosevelt Hotel, New Orleans, Louisiana, April 28-May 1, 1958.

For full particulars write the executive secretary, William P. Didusch, 1120 North Charles Street, Baltimore, Maryland. Essays must be in his hands before December 1, 1957.

JOHNS HOPKINS UNIVERSITY SCHOOL OF HYGIENE AND PUBLIC HEALTH

A 10-year grant totaling \$1,056,000 has been made to the Johns Hopkins University School of Hygiene and Public Health by the National Drug Company of Philadelphia, a subsidiary of the Vick Chemical Company, New York, it was announced recently by Dr. Milton S. Eisenhower, president of the Johns Hopkins University.

The project will be under the direction of Dr. Winston H. Price, associate professor of epidemiology and biochemistry in the Hopkins School, and internationally known for his research work in the fields of rickettsial and virus diseases.

NEW YORK UNIVERSITY POSTGRADUATE MEDICAL SCHOOL

New aspects of health problems intensified by modern living will be presented at a one-week course, "Medical Aspects of Workmen's Compensation," to be offered October 21-25 by New York University Post-Graduate Medical School and the American Academy of Compensation Medicine.

The steadily increasing number of people over 65 beset only by minor ailments has created problems which the physician must deal with in his workmen's compensation practice.

There will be a morning and afternoon session each day of the course which may be taken in its entirety or by individual session.

For application and further information: Office of the Associate Dean, New York University Post-Graduate Medical School, 550 First Avenue, New York 16, New York.

NATIONAL FOUNDATION FOR INFANTILE PARALYSIS

Five new films available for showing to professional audiences are announced by the National Foundation for Infantile Paralysis. They are designed to interest physicians, nurses, physical therapists, occupational therapists, and students of all professional schools.

Subjects of the films are: Rehabilitation of Respiratory patients, Principles of Artificial Respiration, Assistive Devices for the Physically Handicapped, Muscle Breathing in Poliomyelitis, and The Anatomy of the Hand: Part II. Part I of this film was produced earlier and is still available.

AMERICAN ACADEMY OF GENERAL PRACTICE

American family doctors have lined up solidly behind their colleagues across the sea. British physicians, caught between spiraling costs and the Ministry of Health's refusal to grant a promised salary increase, are currently threatening to resign from the National Health Service.

Pointing out that the British medical care plan has failed miserably and put medicine on a mass production basis, the American Academy of General Practice has urged British family doctors and specialists to resign from the NHS. The statement, issued at the Kansas City headquarters office, came from Dr. Floyd C. Bratt, Rochester, New York, chairman of the Academy's Commission on Public Policy.

Reports that British physicians are planning to strike are misleading, Dr. Bratt pointed out. The doctors do not plan to strike. Instead, they simply plan to resign from the NHS. This would mean a return to fee-for-service care. Instead of billing the government, doctors would bill each patient.

Dr. Bratt pointed out that the British physician can't afford to spend more than six minutes with each patient. In this time, he is expected to examine the patient, make an accurate diagnosis, and discuss subsequent care and treatment.

"British doctors are now convinced that they can't trust the NHS. It makes promises and refuses to keep them. I am convinced that the NHS can be held responsible for the confusion that exists today. A more serious consequence has been lower medical care standards," Dr. Bratt said.

"We can be grateful that we can still select our own doctor and rely upon him to provide the finest medical care today available in any part of the world," Dr. Bratt concluded.

AMERICAN PSYCHIATRIC ASSOCIATION

The American Psychiatric Association has set up a project to study ways by which a greater understanding of psychiatry can be conveyed to physicians in general practice. The project has been made possible by a grant from the National Committee Against Mental Illness.

The Liaison Committee has proposed that the general urgent need for expanding psychiatric services in communities throughout the nation can most readily and practicably be met by general practitioners if they can be armed with appropriate basic knowledge of psychiatric skills and practices. Ways must be explored to accomplish this by setting up model postgraduate courses, developing standards for training, training films, course materials, and above all a broad promotional effort which will stimulate the general practitioner's interest in psychiatry and community action in this area.

FIFTH INTERNATIONAL CONGRESS OF INTERNAL MEDICINE

The International Society of Internal Medicine has announced that its Fifth International Congress of Internal Medicine will be held at the new Sheraton Hotel, Philadelphia, April 24-26, 1958. This will be the first meeting of the Society outside of Europe. In making the announcement, the International Society's President, Sir Russell Brain, who is also president of the Royal College of Physicians of London, said, "The Executive Committee of the Society has chosen the United States for its Fifth Congress in response to an invitation extended by the American College of Physicians and with the objective of securing greater American participation in its deliberations and of allowing foreign members, at first hand, to learn more about American developments in the medical sciences."

The objectives of the Society, as stated in its Statutes, are "to promote scientific knowledge in internal medicine, to further the education of the younger generation and to encourage friendship among physicians of all countries." The members are "specialists in internal diseases, acknowledged as such and accepted by the appropriate national societies of internal medicine."

The 1958 Annual Session of the American College of Physicians will occur in Atlantic City, April 28 to May 2, immediately following the Philadelphia Congress. The members of the Congress are invited to attend all the scientific programs and extensive exhibits (the foreign members on a purely courtesy basis). Also, those members of the Society who make an early reservation and advance payment, may join certain Fellows of the College on its customary post-convention cruise to a near-by foreign country. Tours throughout the United States may be arranged through an approved travel agency.

T. Grier Miller, M.D., Philadelphia, is the president of the Congress; Edward R. Loveland, F.A.C.P. (Hon.), is the secretary-general; and Mr. J. Malcolm Johnson, Philadelphia, the treasurer.

The executive committee consists of Frank N. Allan, M.D., chairman, Boston; Philip S. Hench, Philadelphia; Chester S. Keefer, M.D., Boston; Mr. Edward R. Loveland, Philadelphia; William S. Middleton, M.D., Washington, D. C.; T. Grier Miller, M.D., Philadelphia; Walter L. Palmer, M.D., Chicago; Howard A. Rusk, M.D., New York; Wallace M. Yater, M.D., Washington, D. C.

The Program Committee includes Frank N. Allan, M.D.; Chairman, Boston; Philip S. Hench, M.D., Rochester, Minnesota; Carl V. Moore, M.D., St. Louis; Albert M. Snell, M.D., Palo Alto, California; Irving S. Wright, M.D., New York.

AMERICAN HEARING SOCIETY

Walter C. Laidlaw, Detroit, nationally known leader in the field of financing health and community services, was elected president of the American Hearing Society at the agency's thirty-eighth annual conference held at the Statler Hotel, Saint Louis, in June. He succeeds Herschel W. Nisonger, director, Bureau of Special and Adult Education, Ohio State University, Columbus.

As executive vice president and general manager of the United Foundation of Metropolitan Detroit, Laidlaw coordinates appeals of 150 health and service agencies under the famed banner of that city's yearly "Torch Drive." Since 1949 he has supervised the raising of more than \$104,000,000 in eight such campaigns, the 1956 drive totaling \$16,225,000.

RHODE ISLAND MEDICAL SOCIETY

Caleb Fiske Prize

The trustees of America's oldest medical essay competition, the Caleb Fiske Prize of the Rhode Island Medical Society, announce as the subject for this year's dissertation "Hormonal Relationships In Breast and Prostatic Cancer — Their Practical Application." The dissertation must be typewritten, double spaced, and should not exceed 10,000 words. A cash prize of \$350 is offered. Essays must be submitted by December 31, 1957.

For complete information regarding the regulations write to the Secretary, Caleb Fiske Fund, Rhode Island Medical Society, 106 Francis Street, Providence 3, Rhode Island.

WORLD HEALTH ASSEMBLY

The United States invitation to the World Health Assembly to hold a special tenth Anniversary commemorative session and XI Session of the Assembly in the United States next spring was unanimously accepted by the Assembly's Committee on Administration, Finance and Legal Matters at the Committee's final meeting of the X Assembly held in Geneva, Switzerland, on May 23.

Dr. Leroy E. Burney, Surgeon General, U. S. Public Health Service, Department of Health, Education and Welfare, who is leader of his country's delegation to this Assembly, stated that his Government would do all in its power to make both sessions a success. The city where the meeting will be held will be announced later. (It will be recalled that in the summer of 1956 a joint resolution was adopted by the U. S. Congress authorizing the appropriation of a sum not exceeding \$400,000 for the additional costs entailed in holding the XI Assembly in the United States away from WHO Headquarters in Geneva.)

INTERNATIONAL COLLEGE OF SURGEONS

The formation of federations of world-renowned surgeons on a continental basis under the aegis of the International College of Surgeons was announced recently by Dr. Max Thorek of Chicago, founder of the College.

Four units have been established, covering North America, Central and South America, Europe and Asia. The College has active national sections in 40 countries, and these will form the nuclei of the federations.

(Bulletin Board continued on Page 304)

New Portable Hydraulic Bath Chair Lift

A boon to wheel chair and bed-ridden patients is the new Dalton Portable Hydraulic Bath Chair Lift. Most patients can roll their wheel chairs into the bathroom and slide from chair onto the seat of Bath Chair Lift. The seat swings over the tub, and a push of a button lowers the waterproof seat into the tub. The patient, after taking a bath, can push a button which raises the seat to the top of the bathtub where patient can easily slide back onto the seat of the wheel chair.

For further information, write DALTON MFG. CO., 6511 S. Rosemead Blvd., Rivera, Calif.

Classified Advertisements

FOR SALE—Doctor's equipment in order to settle estate. General Supplies (For every day use) valued at \$350.00; General operating surgical equipment, valued at \$700.00—also miscellaneous office equipment, 1E: Remington Rand Adding Machine, Filing Card Cabinet 9" x 12". Utility table, X-Ray developing tank, 1 Seatte and 2 Chairs, 4 slat chairs, ash stands, electric fans, magazine rack. For information contact: Long, Ridge, Harris & Walker, Box 690, Burlington, N. C. Phone CANAL 7-2081 or 6-4556.

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State hospitals, correctional facilities and veterans home. No written examination.

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Three salary groups:

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Salary increases being considered effective July, 1957

U. S. citizenship and possession of, or eligibility for California license required.

Write:

Medical Recruitment Unit, Box A.
State Personnel Board, 801 Capitol Avenue
Sacramento, California

The Month in Washington

The Eighty-fifth Congress is in the final few weeks of its first session with prospects that it will enact few major medical bills this year, but that next year will be a different story. On at least half a dozen important measures action has been postponed, with the understanding that the issues will be fought out in 1958.

Circumstances prevented any delay on one bill that is of considerable importance to the younger doctors—a new version of the doctor draft act. It had to be enacted by July 1, the Defense Department insisted, or not enough doctors would be available to maintain the military medical services at an acceptable level.

The problem is that the Armed Forces require a higher ratio of physicians to troops than exists between physicians and the general population. Without some special law, the services would either have to make out with fewer doctors than they say they need, or draft thousands of non-physicians merely to obtain the doctors who are in the particular age groups.

This scheme was devised: amendment of the regular draft act to allow the call up, to age 35, of the necessary numbers of doctors from among those who had received educational deferments; they could be called because they are physicians, not because they are of a certain age. Also, the national, state, and local Medical Advisory Committees of Selective Service would be continued, as would a number of provisions in the original act that protect the rights of drafted doctors.

As Congress moved toward adjournment, prospects also were that it would enact a bill to help out some states caught in a financial squeeze because of a new act, passed last year but not scheduled to go into effect until July 1, 1957, to increase federal payments for the medical care of persons on the state-federal public assistance rolls.

Under the old system, states could use the U.S. dollars to pay directly to the individuals for their medical care, or directly to the vendors of medical service—hospitals, physicians, and dentists. Many states, adopting the second plan in all or part of

their counties, used the federal money to help maintain pooled funds, which support various medical care programs.

All U.S. money paid out under the new act must be used in the form of vendor payments—that is, not turned over directly to the public assistance cases. At the same time, the law as originally passed stipulated that any money received under the old plan henceforth would have to be handled as “recipient payments,” that is going directly to the persons on public assistance rolls.

A number of states thus faced the prospects of drastically revising their carefully established medical care programs or sacrificing large amounts of federal money. Congress came to their rescue by means of a bill that would allow them to use the old money as before, yet take full advantage of the new federal program.

In the closing weeks of the session, however, two major medical bills were making little, if any progress—those for federal grants to medical colleges to build teaching facilities and for initiating a program of health insurance for federal civilian employees.

A number of bills had been introduced on aid to medical education, representing virtually all the viewpoints in Congress and the administration, but nothing much was happening. Here one factor was the economy drive, which was not too successful in cutting the administration's health budget, yet which virtually precluded any new programs involving large appropriations.

On federal employee health insurance, these long-standing differences of opinion still blocked any compromise: Should emphasis be on basic health insurance or on major medical (catastrophic) coverage? Should U.S. payroll deductions be permitted, or would this open the door to demands for many other payroll deductions, such as for union dues? What safeguards could be set up to prevent either the commercial insurance companies or the nonprofit organizations (union plans and Blue Cross-Shield) from gaining a dominant position?

On these two major bills—as well as on many others, sponsors were not too discouraged. Already they were making plans to press them still more vigorously next year when Congress, looking toward the fall elections, may be more responsive.

Doctors are asked by PHS to be on the alert for a new type A influenza strain expected to work its way into this country from the Far East. Details from state health departments.

* * *

National Library of Medicine officials were still hopeful, as the end of the session neared, that Congress would vote enough money to start constructing the library's new building next year.

* * *

For the first time the U.S. contribution to WHO this year is expected to drop to a third of the total WHO budget. In dollars, however, the U.S. share continues to go up, as the charges to other countries.

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The Export-Import Bank is making long-term, low-interest loans to some Central American countries to build health facilities, such as hospitals and sewage plants.

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Because of widespread interest aroused by Senate hearings, there is considerable pressure for action before adjournment on legislation for some form of federal control over union welfare funds. One bill, by Senator Goldwater, would lay down strict procedures, including regular audits.

* * *

Also before Congress, but not making rapid progress, is a bill that would give the federal government control over amphetamines and barbiturates. Various types of bookkeeping and registration would be required, but physicians would be exempt from the requirements. It has administration support.

BOOK REVIEWS

Battle For the Mind. By William Sargent. 263 pages. Price, \$4.50. Garden City, New York: Doubleday & Company, Inc., 1957.

Inappropriately subtitled "A Physiology of Conversion and Brainwashing," this polemic takes the reader on a haphazard tour of the Pavlovian underworld. From the moment the Neva at flood seeps into Pavlov's laboratory and upsets the dogs, until Dr. Sargent is revealed totally as an evangelist in the final chapter, the reader is subjected to half-truths, irrelevancies, and assumptions of dubious nature. The author succumbs too easily to the universal desire "to explain a mass of facts

by a single cause," which "becomes an ardent and sometimes an undiscerning passion in the human mind." (Tocqueville) Too many other, more mellifluous, voices demand hearings to let us linger long with this plea for a new phrenology.

BOOKS RECEIVED

The Lunatic Fringe. By Gerald W. Johnson. 247 pages. Price, \$3.95. Philadelphia: J. B. Lippincott Company, 1957.

Epilepsy: Grand Mal, Petit Mal Convulsions. By Letitia Fairfield, M.D., D.P.H. 159 pages. Price, \$4.75. New York: Philosophical Library, Inc., 1957.

The Care of the Expectant Mother. By Josephine Barnes, M.D. 270 pages. Price, \$7.50. New York: Philosophical Library, Inc., 1957.

William Harvey: His Life and Times; His Discourses; His Methods. By Louis Chauvois. Price, \$7.50. New York: Philosophical Library, Inc., 1957.

Fluid and Electrolyte in Practice. By Harry Statland, M.D. 229 pages. Price, \$6.00. Philadelphia: J. B. Lippincott Company, 1957.

Heart Sounds, Pulsations and Coronary Disease. By William Dock, M.D. 98 pages. Price, \$2.50. Lawrence, Kansas: University of Kansas Press, 1956.

Practical Conferences Held at New York Hospital—Cornell Medical Center. Edited by Claude E. Forkner, M.D. Volume 6. 337 pages. Price \$6.75. New York: Appleton-Century-Crofts, 1957.

Ciba Foundation Colloquia on Endocrinology, Volume X: Regulation and Mode of Action of Thyroid Hormones. By G. E. W. Wolstenholme and Cecilia M. O'Connor. 311 pages. Price, \$8.50. Boston: Little, Brown, and Company, 1957.

Ciba Foundation Symposium on the Chemistry and Biology of Purines. By G. E. W. Wolstenholme and Cecilia M. O'Connor. 327 pages. Price, \$9.00. Little, Brown and Company, 1957.

The Riddle of Stuttering. By C. S. Bluemel, M.D. 142 pages. Price, \$3.50. Danville, Illinois: The Interstate Publishing Company, 1957.

Expectant Motherhood. By Nicholson, J. Eastman, M.D. 198 pages. Price, \$1.75. Boston: Little, Brown and Company, 1957.

The Fight for Fluoridation. By Donald R. McNeil. 241 pages. Price, \$5.00. New York: Oxford University Press, 1957.

Medical Licensure Examinations. Edited by Walter L. Bierring, M.D. Edition 8. 964 pages. Price, \$10.00. Philadelphia: J. B. Lippincott Company, 1957.

BULLETIN BOARD

(Bulletin Board continued from Page 301)

WORLD MEDICAL ASSOCIATION

At 3:30 p.m. on Friday, June 7, 1957, Louis H. Bauer, M.D., chairman of the Committee on Medicine and the Health Professions of the President's People to People Program, paid tribute to the immediate and spontaneous response of the pharmaceutical industry in fulfilling emergency calls.

On Friday, May 31, Dr. Bauer as Secretary General of The World Medical Association had received an urgent cable from the Philippine Medical Association requesting "immediate airlifting of antipyretics, analgesics, and if indicated polyvalent flu vaccine." The epidemic, which a week previously had been limited to the city of Manila, was spreading rapidly into the rural areas. All medications would be distributed through the component societies of the Philippine Medical Association.

Even though it was a holiday week-end, the Burroughs Wellcome Co., Inc., of Tuckahoe, New York was able to prepare a 300-pound shipment of an antipyretic analgesic and deliver it to Newark Airport before 5:00 p.m.

The Secretary of Tailored Travel, Inc., 32 East 69th Street, New York City, had been consulted relative to means of providing air transport for the shipment. He volunteered to make all necessary arrangements Friday night through the cooperation of CAB and the Flying Tiger Cargo Service flew the drugs to San Francisco, where they were transferred to Pan American World Airways and delivered in Manila on Sunday morning.

Other pharmaceutical companies responded. On June 5, the McNeil Laboratories Inc., Philadelphia, had 600 pounds of analgesic on its way to Manila; Eli Lilly & Co., in Indianapolis, had carried on a week-end research project in the hope that their flu vaccine would prove effective; Chas. Pfizer & Co., Inc., Brooklyn, offered immediate shipment of antibiotics and tranquilizers should they be deemed useful; E. R. Squibb & Sons is prepared to ship antipyretics and analgesics as they are needed.

Dr. Bauer concluded his report by noting that "the complete unity of the American health professions in its humanitarian mission and the spontaneous generosity of the pharmaceutical and transportation industries not only proves the strength and soundness of the principle of the People to People Program and The World Medical Association, but even more important—it strengthens the faith of the Philippine doctors and people in the democratic way of life."

U. S. ATOMIC ENERGY COMMISSION

Award of thirty-one unclassified life science research contracts in the fields of medicine, biology, biophysics, and radiation instrumentation has been announced by the U. S. Atomic Energy Commission. The contracts were awarded to universities and private institutions as part of the AEC's continuing policy of assisting and fostering research and development in fields related to atomic energy as specified in the Atomic Energy Act of 1954, and as amended in 1956.

Among the institutions which were awarded contracts are Duke University and the University of North Carolina School of Medicine.

DEPARTMENT OF THE ARMY

The Department of Defense has issued policy guidance for military to be vaccinated as soon as possible with a special single-strain vaccine to combat a previously unidentified virus which has caused an outbreak of influenza in the Far East.

Dr. Frank B. Berry, Assistant Secretary of Defense (Health and Medical), in a Department of Defense Instruction, said that the vaccine also will be made available to civilian employees and military dependents on a voluntary basis at overseas stations.

Dr. Berry said that a polyvalent vaccine containing the new vaccine strain will be given later on schedules previously established by the military services, provided the manufacturers can meet these schedules without interfering with the priority on the production of the new, special vaccine.

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Dr. Leroy E. Burney, Surgeon General of the Public Health Service, has established an advisory committee of physicians and health officers to consider precautionary steps in the United States against the current influenza epidemic in the Far East.

The advisory committee held its first meeting at the Department of Health, Education, and Welfare on June 10.

Epidemics in the Far East have been caused by a new strain of influenza virus which apparently is not controlled by current influenza vaccine. Much of the influenza caused by the new virus has been relatively mild, marked by a three or four day period of fever and other typical flu symptoms.

* * *

The first issue of an abstract periodical, Cardiovascular Diseases, has been announced by the Public Health Service and the Excerpta Medica Foundation. The new journal, which will be published by the Foundation, will provide a means through which scientists interested in heart research can keep abreast of the literature, now a difficult task because of the increasing number of scientific publications in this field.

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Traumatic Rupture of the Esophagus By Compressed Air

*Report of Case with Review of 110
Cases of Esophageal Rupture*

PAUL D. WEBSTER, III, M.D.

and

JOHN R. TAYLOR, M.D.

WINSTON-SALEM

Although rupture of the esophagus was first described by Boerhaave in 1724, it is still frequently misdiagnosed, and commonly fatal. Confusion concerning the terminology and classification exists. Probably the first antemortem diagnosis was made by Meyer in 1858. Barrett⁽¹⁾ is given credit for performing the first thoracotomy, with repair of the esophageal defect, in 1946. In 1944, however, Graham⁽²⁾ did a closed thoracotomy on two patients, who survived. Excellent reviews were made by Fitz⁽³⁾ in 1877, Walker⁽⁴⁾, 1914; Barrett⁽¹⁾, 1946; and Ware⁽⁵⁾, 1952.

Traumatic rupture of the esophagus is a rare condition, there being only 12 reported cases. To the best of our knowledge, this is the third case of esophageal rupture by compressed air to be reported in the English literature. The first case, reported by Petren⁽⁶⁾ in 1908, was that of a 27 year old man who accidentally released a compressed air hose in his mouth. The youth died 27 hours later with an esophageal rupture 6 cm. long.

The second case was reported by Kerr, Sloan, and O'Brien⁽⁷⁾ in 1953. The patient, a 3 year old boy, allegedly bit into a tractor inner tube with a pressure of 25 to 30 pounds per square inch. The pressure was transmitted directly into the child's mouth, producing a rupture in the left posterior lower third of the esophagus. Physical ex-

amination shortly after the accident revealed an acutely ill patient, with cervical emphysema noted immediately after the accident, and a left tension pneumothorax. The rupture was diagnosed by swallowing iodized oil. Surgery was not undertaken because of the patient's poor condition. He recovered, with pleural drainage, after an illness of 40 days.

The first case of tracheoesophageal fistula from a blast injury was reported in 1955 by Volk, Story, and Marragani⁽⁸⁾, who stated that their case was the eighth recorded instance of tracheoesophageal fistula, resulting from external trauma. It is of interest that most of these traumatic cases resulted from the steering wheel of an automobile.

Classification

The following brief etiologic classification appears to include all cases of either spontaneous or traumatic rupture. We cite Samson⁽⁹⁾ specifically for his description of postemetic rupture.

1. Rupture of a previously normal esophagus
 - a. Traumatic rupture from external forces
 - b. Rupture caused by foreign bodies in the esophagus (including not only those cases due to bones, food particles, and so forth, but a large group due to esophagoscopy
 - c. Postemetic rupture
 - d. Spontaneous cases without a recognizable precipitating event

2. Rupture or perforation of a previously diseased esophagus
 - a. Inflammatory perforation due in most cases to peptic ulceration or esophagitis
 - b. Neoplastic perforation resulting usually from carcinoma

Many authors believe that the cases in group 2 should be termed "perforation" rather than "rupture." We believe that debate on this matter is of little consequence.

Case Report

A 45 year old white man, injured while operating a pneumatic drill, was admitted to the Martinsville General Hospital on November 26, 1949, with a laceration over the right eye. At the time of the injury he was removing a 6.5 inch flattened metal cap from a 6 inch pipe containing 900 pounds of air pressure per square inch. Although it was stated on admission that this cap flew off and struck the patient in the chest, ricocheting to his forehead, later discussion revealed that it might not have struck his chest at all. The blow did not render him unconscious, although he was knocked down. He was brought to the emergency room at once.

On admission, his blood pressure was 150 systolic, 90 diastolic, pulse 60, respirations 20, and oral temperature 97 F. The laceration on his right upper eyelid and forehead was repaired without difficulty, but shortly thereafter the patient began to complain bitterly of mediastinal pain, partly relieved by sitting up. He was given 15 mg. of morphine with no relief, and repeated administration every three hours failed to relieve the pain completely. Distention, tenderness, and rigidity of the abdomen also became evident.

That afternoon the patient began to have respiratory difficulty; the pulse rose to a peak of 158, the temperature to 104.8 F. rectally, and the blood pressure fell to 80 systolic, 50 diastolic. Progressive subcutaneous emphysema was noted in the right side of the chest and the neck. Because of shock the patient was given 3.5 pints of whole blood. Radiologic examination of the chest was unsatisfactory, and although the films were technically unsatisfactory, they were interpreted as being normal.

The patient's condition continued to deteriorate, and at 8:00 P.M. on November 27, 1949, 30 hours after the injury, he gasped a few times and died.

Postmortem examination revealed a muscular white male, weighing 195 pounds and exhibiting no evidence of external trauma except about his eye. The right pleural cavity contained 2,000 cc. of serosanguinous material, which had completely collapsed the right lung. There was considerable mediastinal emphysema and a fibrinous pericarditis; the pericardium contained 100 cc. of brownish-



Figure 1

yellow fluid. A longitudinal ragged tear 8 cm. long was found on the posterior surface of the upper and middle third of the esophagus (fig. 1). Two incomplete 6 cm. rents, involving only the inner esophageal layers, were also noted, one on either side of the complete rupture. There was no evidence of pre-existing esophageal disease.

The stomach contained 2,000 cc. of greenish-yellow watery fluid, and measured 45 by 22 by 22 cm., filling almost the entire abdomen. The first part of the duodenum was narrowed to 6-7 mm., presumably from a punched-out ulcer 1 cm. in diameter.

The remainder of the autopsy findings were non-contributory; the brain was not examined. The final anatomic diagnoses of significance included rupture of the esophagus with acute mediastinitis, right hemothorax with acute empyema and compression, atelectasis of the right lung, bilateral pulmonary congestion and hemorrhage, acute fibrinous pericarditis, acute gastric dilatation, and chronic duodenal ulcer.

Comment

Various studies have been made on cadavers to determine the intraluminal pressure necessary to rupture the esophagus. MacKenzie⁽¹⁰⁾, in 1884, found that between 5 $\frac{3}{4}$ to 11 pounds per square inch, with an average of 7 pounds, was required to rupture the human esophagus. Burt⁽¹¹⁾, in 1931,

reported that esophageal rupture occurs with a pressure of 4.07 pounds per square inch. Interestingly, he noted that more pressure was required to rupture an infant's esophagus. Considering that this patient must have been very close to the cap to have been struck in the head or chest, it seems likely that the force of air exerted directly through the mouth was sufficient to produce instantaneous rupture of the esophagus. It is not likely that an object measuring 6.5 inches in diameter would strike the chest and then glance to the forehead. In view of this evidence, it seems most likely that the esophageal rupture resulted from increased intraluminal pressure.

Diagnostic Features

In a discussion of the clinical features, little is to be gained from the distinction between rupture and perforation, as the signs, symptoms, and course in the two conditions are similar. If pre-existing esophageal disease is associated with periesophageal fibrosis, widespread mediastinal contamination may be minimized or prevented and a fulminating course is usually not seen. Such is the case when perforation is secondary to chronic ulcerative esophagitis, malignant tumors, or diverticula. Fishberg⁽¹²⁾ has reported a case which simulated myocardial infarction. Perforation in patients suffering from esophageal stricture secondary to lye ingestion usually pursues a more benign course because of the periesophageal fibrosis. Postemetic rupture is usually more catastrophic because of the extensive mediastinal and pleural contamination, as is well demonstrated by a case in which 850 cc. of beer were aspirated from the pleural cavity⁽¹³⁾. Rupture was preceded by vomiting in 66 per cent of the cases reviewed. Emesis after rupture was described in only 5 per cent, substantiating the impression that vomiting seldom occurs *after* rupture.

In the 110 cases reviewed, more than 50 per cent of the patients were between the ages of 40 and 69 years. Eighty-three per cent were men and 17 per cent were women. This condition, especially the postemetic type, has been described as a disease of men, most likely because of their proclivity for overindulgence, though not all patients fall into this classification.

A history of an alcoholic intake before rupture was noted in 21 per cent of the

Table 1

Location of Pain as Described in
110 Reported Cases

Location	Per Cent of Cases
Chest	55
Right	1
Left	6
Substernal or lower third	29
Bilateral	3
Back	16
Epigastric region	36
Abdomen	11
Neck	1

cases. Food intake shortly before rupture was reported in 23 per cent. Fewer cases are associated with overindulgence than was formerly believed. More significant is the fact that a history of "stomach trouble" or some other gastrointestinal disorder was noted in 38 per cent of the cases. Such a history often leads to an erroneous diagnosis.

Hematemesis, either "coffee ground" or bright red, was noted preceding or at the time of rupture in 27 per cent of the cases. Amounts varying from several milliliters to "a pint or more" were noted.

Table 1 shows the location of pain as described. Pain in the arms and legs is only rarely noted and hence is not included; however, the fact that pain in the extremities has been reported may add to the diagnostic confusion. The pain was described as sudden and severe in 77 per cent of the cases. It was not reported in pediatric, unconscious, or moribund patients. In some cases only "chest pain" was described. "Back pain" is interpreted as being limited to the interscapular and upper lumbar regions. Pain located in the latter area may be confused with renal colic. Pain was described as epigastric in 36 per cent and abdominal in 11 per cent of the cases. The patient with neck pain has a rupture in the upper third of the esophagus. With involvement of the pleura and pleuritis, the pain will be augmented on deep inspiration and respirations will become rapid and shallow.

The amount of morphine required to relieve the pain indicates the severity. Palmer⁽¹⁴⁾, in his text, stated that resistance to morphine is characteristic of the disease. Not infrequently the patient will collapse at the onset of pain. Radiographic examination may be difficult because the patient cannot lie still. Occasionally the pain is less severe in the sitting position.

Except for the evidence of severe pain,

Table 2

Signs and Symptoms of Esophageal Rupture

Signs and symptoms	
History of "stomach trouble"	38
Emesis prior to rupture	63.6
Hematemesis	27
Dyspnea	51
Shock	52
Cervical emphysema	54.5
Abdominal tenderness and rigidity	43

the initial physical examination is frequently unrevealing and fails to indicate the severity of the disease. This is demonstrated by our case. As in rupture of an abdominal viscus, the patient may seem to be in no great difficulty, only to deteriorate rapidly.

Findings referable to the chest, such as minimal rales or decreased breath sounds, were demonstrable in 36 per cent of the patients at the initial physical examination or shortly thereafter. Chest signs in the remainder developed during the hospital course. This emphasizes the necessity for frequent meticulous examinations of the undiagnosed acutely ill patient.

Fifty-two per cent of the patients were described as being in a state of shock or near shock at the time of admission or shortly thereafter. As a rule the pain is so severe that conscious patients seek medical aid immediately. Many patients were moribund on admission.

Subcutaneous cervical emphysema was noted in 54 per cent of the cases, and if the history is compatible with esophageal rupture, this sign is usually considered diagnostic. The emphysema may develop initially or hours later; usually, if present, it appears during the first 24 hours. Cervical emphysema was present in only a fourth of the patients when first seen. If esophageal rupture is possible, one should not wait for emphysema when other findings suggest the disease. Samson⁽⁹⁾ has described a "nasal twang" to the voice, which may precede the emphysema by 1 to 12 hours. The emphysema is usually noted initially in the region of the sternal notch, and spreads to involve the neck, face, and anterior part of the chest. Hammen's sign, a loud clicking sound synchronous with the heart beat, has been reported by Alt and others⁽¹⁵⁾.

Abdominal tenderness and rigidity were reported in 42 per cent of the cases. Peristalsis may be increased, decreased, or absent. The abdomen may be tympanitic from distention.

Table 3

Roentgenographic Findings in the Chest

Finding	Per Cent
Left pneumothorax	2
Left hydrothorax	27
Left hydropneumothorax	23
Right pneumothorax	1
Right hydropneumothorax	5
Bilateral hydropneumothorax	14

Roentgenograms of the chest were reported as diagnostic in 42 per cent of the cases and as unrevealing in 8 per cent. No mention of roentgen studies was made in the remainder. Roentgen studies with barium and iodized oil were employed for diagnosis in 17 per cent of the cases, with only one false negative result reported. This is apparently the best method available for diagnosing and locating the esophageal rupture. Negative x-ray studies may be obtained because the films were made too early for abnormalities to be demonstrated, or because of failure to obtain the cooperation of the patient, failure to make upright films, or failure to interpret the films correctly. It has been wisely suggested that upright thoracic and abdominal films be taken on all acutely ill patients. Iodized oil is preferred to barium. The earliest roentgenographic findings, those of acute mediastinitis, consist of mediastinal emphysema, widening of the mediastinal shadow, obliteration of the cardiophrenic angle and possible fluid levels.

Thoracentesis has both diagnostic and therapeutic value. In most of the cases in which an early diagnosis was made, it was based on the finding of gastric contents—such as food, beer, or gastric secretions—obtained by pleural tap. If there is doubt, the patient may be asked to swallow some dye—for example, methylene blue. This is preferable to having the patient drain milk or orange juice through a thoracotomy tube. Thoracentesis was done in 23 per cent of the cases confirming the diagnosis each time. Therapeutically, the tap relieves the tension hydropneumothorax and respiratory insufficiency, which is a common cause of early death.

A correct diagnosis was made and followed by some form of definitive therapy in 41 per cent of the cases. This consisted of thoracotomy with repair of the rupture in 32 per cent; conservative therapy—that is, some form of drainage—14 per cent. The mortality following thoracotomy was 34 per

cent; conservative management, 54 per cent. With available methods of thoracic surgery, thoracotomy should be performed in almost all cases. The mortality and morbidity are far greater when conservative therapy, such as pleural or mediastinal drainage, is employed. The most frequent mistaken diagnosis is perforated peptic ulcer. Laparotomy was done in 12 per cent of the cases, with negative findings each time; only one of these patients survived, and then only after thoracotomy. Two ruptures have been repaired through abdominal incisions; both patients died.

Sixty-nine per cent of the patients died; 46 per cent during the first 24 hours, which emphasizes the importance of immediate diagnosis and treatment.

Characteristically, the rupture occurs in the left posterior portion of the lower third of the esophagus. The lesion was located in the lower third in 90 per cent of the cases, the middle third in 5 per cent, and the upper third in 2 per cent. In 2 cases the lesion extended into the stomach. We found only 2 cases of complete disruption of the esophagus. The rupture was longitudinal in 97 per cent of the cases.

The most frequent mistaken diagnoses were perforated peptic ulcer and coronary artery occlusion or myocardial infarction. In 30 per cent of the patients, thoracic lesions were not considered. Other entities which may be confused with rupture of the esophagus are spontaneous pneumothorax, rupture of a bronchus, pulmonary infarction or embolus, dissecting aortic aneurysm, diaphragmatic hernia, acute pancreatitis, rupture or infarction of the spleen, and rupture of the gallbladder.

Rupture of the bronchus producing mediastinal and cervical emphysema may closely simulate esophageal rupture. Spontaneous pneumothorax, however, usually is not associated with large amounts of fluid.

Certainly it would behoove the physician to consider rupture of the esophagus in the differential diagnosis when the foregoing conditions are encountered.

Summary

To the best of our knowledge this is the third reported case of traumatic rupture of the esophagus resulting from compressed air. A review of the literature revealed only 12 cases of rupture of the esophagus from external violence. There are 8 re-

ported cases of tracheo-esophageal fistula resulting from external trauma.

Spontaneous and postemetic rupture of the esophagus is a more common entity. Since the signs, symptoms, and clinical course in cases of esophageal rupture are similar, the diagnostic features of 110 reported cases have been reviewed. A history of "stomach trouble" or some other gastrointestinal disorder was noted in 38 per cent of the cases reviewed. Spontaneous rupture is frequently preceded by vomiting, whereas emesis after rupture is uncommon.

The pain was usually sudden and severe, occurring most commonly in the chest or epigastrium. Subcutaneous emphysema was noted in 54 per cent, but only in about one fourth of the cases will this sign be present at admission. It usually appears during the first 24 hours.

Roentgenographic studies were helpful in 42 per cent of the cases. The use of iodized oil or a barium swallow afford the best method for locating the rupture.

Thoracentesis may be of both diagnostic and therapeutic value. Early diagnosis and therapy are imperative.

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The Effect of Prolonged Continuous Therapy on the Course of Chronic, Recurring Peptic Ulcer

*Anticholinergic Therapy with SKF-4740 (Darbid)**

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Since peptic ulcers frequently heal without treatment and usually respond in a most satisfactory manner to simple management, it is difficult to evaluate the effectiveness of any medication for this disease. Indeed, it has been said that the newer drugs that have been developed for the management of peptic ulcer have simply provided the modern physician with a greater variety of methods of obtaining the same unsatisfactory results. Certainly, it is impossible to evaluate the effects of any given method of therapy unless one has an understanding of the type of patients treated, the natural history of the disease, and the tendency of patients to frequent recurrences.

For the past five years we have been interested in observing the results of long-term, continuous therapy with anticholinergic preparations. These studies are

probably unique in that they represent the largest number of ulcer patients under continuous treatment for such long intervals⁽¹⁾.

It is generally accepted that the management of peptic ulcer is greatly facilitated by the proper use of anticholinergic drugs. The past decade has seen the development of synthetic anticholinergic drugs having pronounced inhibitory effects on gastrointestinal motility and, to a lesser degree, on gastric secretion.

Ideally, such a preparation should be one that (1) can be administered orally without the development of tolerance or disagreeable side effects, (2) is capable of suppressing excess motor and secretory activity for long periods of time, and (3) is not prohibitive in cost.

SKF-4740 (Darbid), developed in Europe under the synonym R 79, has shown promise of fulfilling these requirements. Previous studies have shown that SKF-4740 (3-carbamoyl-3,3-diphenylpropyl diisopropylmethyl ammonium iodide) is a potent inhibitor of basal and histamine-induced gastric secretion in human sub-

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jects⁽²⁾. Following an intramuscular injection of 5 mg., gastric secretion was virtually absent for a test period of two hours. Highly significant inhibition of gastric secretion was observed for 10 to 12 hours following a single oral dose of 30 mg. (22.2 mg. isopropamide—7.8 mg. iodide). Given orally, Darbid is less toxic and longer acting than atropine, and about eight times more effective than atropine in preventing ulcer formation in "Shay" rats⁽³⁾. The effects of Darbid are not limited to the upper digestive tract. Marked diminution in basal activity of the colon has been demonstrated by the inlying balloon technique⁽⁴⁾. Following subcutaneous doses of 2.5 mg., subjects showed marked diminution in phasic activity of the colon. Thus the drug has been shown to be highly effective in suppressing normal colonic motility in man.

The use of anticholinergic drugs as adjuncts to conventional therapy in selected cases of peptic ulcer has become well established. The value of drug therapy in the prophylactic management of the asymptomatic ulcer patient, however, is questionable, and the present study was, in part, an effort to determine the usefulness of such treatment. It was felt that the information obtained might shed additional light on the general problems of chronicity and recurrence in peptic ulcer.

The difficulties involved in such a study are obvious. Asymptomatic patients usually are reluctant to follow long-term treatment, particularly if the medication is expensive and must be taken at frequent intervals. However, the opportunity to receive free medication requiring doses only twice a day was welcomed by the group of "problem" ulcer patients being reported.

Method of Study

The method used was similar to that previously described in detail⁽⁵⁾, although in the Darbid study a "double blind" approach was not utilized. The results were compared with those obtained in a similar study in which effective preparations were given to similar groups of patients and in which a placebo was used as a control.

Fifty patients with radiographically proved peptic ulcers and with a well established pattern of recurrences were studied for periods averaging 8.4 months. This group included 44 men and 6 women ranging in age from 22 to 60 years, with a mean

age of 42.8 years. The average duration of symptoms was 8.9 years. Patients with pyloric obstruction were excluded. Fifteen patients (30 per cent) had a past history of hemorrhage; 6 (12 per cent), of perforation or previous surgery. Forty-five patients had an active ulcer at the time the study was begun, and 5 had had an active ulcer within six months preceding the study. There were 48 instances of duodenal ulcer and 2 of gastric ulcer. The duration, frequency, and severity of ulcer symptoms were determined at the outset of the study and were classified as mild, moderate, or severe. These symptoms were considered mild in 2 patients, moderate in 38, and severe in 10.

All patients were advised to continue taking a bland diet, with feedings between meals. Except for an occasional sedative, no other medication was prescribed. No effort was made to limit activity or the use of tobacco and alcohol. Patients were advised against the use of preparations containing caffeine, acetylsalicylic acid, or salicylates.

The patients were instructed to take one 10 mg. tablet of Darbid twice daily at intervals of approximately 12 hours. All patients were treated on an outpatient basis except when hospitalization was required because of complications related to the ulcer. A daily analysis of symptoms was recorded by each patient on a special form. At the end of each month, patients estimated their progress and recorded it on the card. Both of these criteria were compared with the results of monthly examinations. The treatment and observation of each patient were continued beyond the period when one might ordinarily anticipate a recurrence on the basis of the patient's history. Final evaluation was based on the data recorded by the patient, and on clinical observations of the investigator at each monthly examination. Re-evaluation by x-ray was included only when there was clinical evidence of recurring ulcer activity or other evidence of progression of the disease. Each patient's clinical status was classified in the following ways:

1. Results (good to excellent or fair to poor)
2. Recurrences (none, fewer and milder, same or more)

Table 1

Comparison of Darbid with Atropine and Placebo in the Treatment of Peptic Ulcer

	Placebo	Atropine	Darbid
Dosage	2 tablets four times daily	0.2 mg. four times daily	10 mg. twice daily
No. patients and length of follow-up	15; 7 months	37; 11 month	50; 8.4 months
Results			
Good to excellent	7 (47%)	19 (51%)	45 (90.0%)
Fair to poor	8 (53%)	18 (49%)	5 (10.0%)
Recurrences			
None	4 (27%)	6 (16%)	18 (36 %)
Few	4 (27%)	17 (46%)	31 (62 %)
Same or more	7 (46%)	14 (38%)	1 (2 %)
Complications			
Hemorrhage	0	2 (5%)	1 (2 %)
Perforation	0	0	1 (2 %)
Obstruction	0	0	0
Other conditions requiring surgery	0	1 (3%)	0
Side Effects			
Oral	1 (7%)	14 (38%)	1 (2 %)
Visual	0	4 (11%)	1 (2 %)
Urinary	0	4 (11%)	0
Constipation	0	0	5 (10 %)

3. Complications under therapy (hemorrhage, obstruction, perforation, or other conditions requiring surgery).

Results

The results of therapy are summarized in table 1. In those patients who had no ulcer distress throughout the period of observation and those who were better in spite of recurrences, the results were classified as good to excellent; 90 per cent of the patients studied fell into this category. Ten per cent of the patients were evaluated as worse, unchanged, or only slightly improved, and in these the results were classified as fair to poor. Thirty-six per cent of the patients had no recurrences during the interval of study; 62 per cent had fewer or milder recurrences; and 2 per cent apparently had as many or more.

Side Effects and Complications (Table 1)

Four of the patients (8 per cent) discontinued the drug: 2 (4 per cent) because of intolerance (dry mouth and constipation), 1 (2 per cent) who required surgery, and 1 (2 per cent) who died in an accident. Three additional patients discontinued the drug when they became asymptomatic. Only 1 other patient noted dryness of the mouth in mild degree, and 1 had mild visual blurring. Urinary hesitancy was not reported by any patient. The only side effect which was marked enough to require a change in dosage was constipation. In 5 patients (10 per cent) the dose had to be altered for this reason. One patient re-

mained asymptomatic on 5 mg. daily, 1 preferred taking 5 mg. three times daily, and 2 were asymptomatic on 5 mg. twice daily.

One patient (2 per cent) had hemorrhages while on therapy. A second patient finally had an operation, which revealed a chronic perforated ulcer of the duodenum walled off in the liver.

Comment

Our present knowledge concerning the development of peptic ulcer suggests that this disease is the end result of a multiplicity of factors, the most important being acid pepsin, abnormal motility, and unknown factors decreasing mucosal resistance. Certainly a variety of other factors, including nervous and endocrine disturbances, infections, and certain drugs, may influence the development of ulcers. Present-day treatment reflects what we know and what we do not know about this disease. In general, therapeutic emphasis has been on the so-called "stomach-rest regimen," which attempts to control abnormal motility, alter the pH of the gastric contents, and minimize the activity of acid pepsin.

The development of synthetic anticholinergic drugs has proved a new and valuable method of treatment aimed at decreasing gastric motility and the production of hydrochloric acid. In addition, the parenteral administration of such preparations is often effective in relieving pain that has not responded to simple measures and is ap-

parently unrelated to gastric acidity *per se*. The first group of synthetic anticholinergic agents to appear was associated with a number of undesirable side effects which limited their value. With the more recent drugs, it is easier to obtain the desired results without producing noticeable side effects.

Because peptic ulcer is characterized by spontaneous remissions and frequent exacerbations, the complete evaluation of these therapeutic agents in the treatment of this disease is difficult. The fact that patients become asymptomatic while under any form of therapy does not necessarily indicate a cause-and-effect relationship. The results of treatment can best be appraised by a controlled study that includes a carefully documented history of the patients showing the frequency of recurrences and complications. Adequate follow-up examinations must be conducted during therapy. In the present study each patient's history served as a control. In addition, the over-all data were compared with those obtained in similar patients who had been maintained on similar drugs for equally long intervals.

Previous studies have shown that the results in patients receiving placebos or 1.6 mg. of atropine per day were almost equally divided between the "good to excellent" and the "fair to poor" groups (table 1). Analysis of the data reveals that patients receiving Darbid obtained significantly better results than those receiving atropine or placebos.

Results of this study and of those previously reported indicate that patients with peptic ulcer who are maintained on adequate doses of anticholinergic drugs and are given the support of frequent visits to a physician who provides psychotherapy and shows a constant interest fare better than those taking only placebos or atropine in the dosage noted.

The utilization of a potent anticholinergic drug such as Darbid, which has a low incidence of side effects and prolonged action is a helpful adjunct in the management of

peptic ulcer disease. It is equally apparent, however, that present methods of treatment, while they help to produce a remission, do not prevent recurrences. The incidence of complications — hemorrhage, perforation, and other conditions ultimately requiring surgery — appears essentially unchanged.

Summary and Conclusions

Fifty patients with peptic ulcer were treated for an average period of 8.4 months with Darbid—a potent, long-acting anticholinergic drug requiring administration only twice daily. Like the other potent anticholinergic drugs that have been studied, Darbid provides rapid and gratifying relief of pain, chiefly through its effect on gastric motility. It was well tolerated in the dosage used, and the incidence of side effects was negligible. The most marked and constant side effect was constipation, which could be controlled without difficulty except in unusual instances. Other side effects, when noted, tended to decrease during therapy. Darbid seems of particular value as an adjunct to conventional therapy for peptic ulcer because its long action simplifies administration.

As has been noted in previous studies utilizing other preparations, recurrences, hemorrhage, and perforation are not prevented by the constant administration of any drug. Peptic ulcer continues to be a problem of management, and the development of new drugs has not obviated the need for other supportive measures.

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The Effect of Prolonged Continuous Therapy on the Course of Chronic Recurring Peptic Ulcer

*Antacid Therapy with Dihydroxy Aluminum Aminoacetate (Alglyn)**

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Since benign peptic ulcer does not occur in patients with permanent achlorhydria and since most patients with peptic ulcer have a normal or hyperacid gastric secretion, the relationship between ulcer and acid appears to be real. Gastroenterologists have acknowledged this relationship by the dictum "No acid, no ulcer." It should be noted, however, that no definite correlation has been demonstrated between the degree of acidity and the amount of pain or the recurrence of ulcer. There is no doubt that factors other than gastric acidity are concerned in the etiology and pathogenesis of ulcer, and that symptomatic relief can be obtained without the use of antacid medication. Clinically, however, antacids are recognized as being of value in controlling the acute symptoms of the disease.

The effect of acid-neutralizing drugs on the character of the gastric secretion is influenced by (1) the amount of drug administered, (2) the phase of digestion, and (3) the presence or absence of disease. The ideal antacid preparation would be one that is nonirritating and can be used in small doses to neutralize large amounts of gastric juice promptly and for prolonged periods. It should *not* (1) cause systemic alkalosis, (2) produce a rebound stimulation of acid secretion, (3) interfere with digestive processes, (4) induce diarrhea or constipation, or (5) release carbon dioxide on reaction with hydrochloric acid. Although a pH of 5 is necessary for complete inactivation of pepsin, peptic activity is most pronounced

at pH 1.5 to 2.5. Rapid neutralization of the gastric secretion to a pH of 3.5 relieves ulcer pain, and this level is generally considered optimal for antacid therapy.

The effectiveness of many antacids has been evaluated *in vitro*. Such studies usually overestimate the actual ability of the antacid to neutralize the gastric contents of the ulcer patient, although in most instances where *in vivo* studies have also been conducted a correlation is observed in the results obtained by the two methods. The explanation for the difference between the two studies lies in the fact that the *in vitro* studies are not influenced by the rate of acid secretion, the rate of gastric emptying, or the rate of reaction between antacid and gastric contents.

A comparative *in vitro* study of the buffering capacity of two dozen commercially available gastric antacid preparations showed the action of dihydroxy aluminum aminoacetate to be prompt and prolonged, elevating the pH level quickly above 4.25 and sustaining it above 3.5 for three hours⁽¹⁾. Dihydroxy aluminum aminoacetate (DAA) has been demonstrated to be more efficient in acid combining power than is dried aluminum hydroxide gel, and its buffering capacity is approximately six times as great. In contrast to aluminum gel, the activity of DAA is not decreased with time, and its buffering capacity is not appreciably diminished by gastric pepsin⁽²⁾. The tablet goes into colloidal suspension rapidly in water. Rossett and Rice⁽³⁾ demonstrated the tablet form of DAA to be more active than a variety of straight aluminum hydroxide magmas, 4 tablets raising the pH *in vitro* rapidly to 3.5 and maintaining it above 3.0 for an hour and 15 minutes. Because of the convenience of tablet medica-

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tion as compared with the liquid gel — a convenience which in the use of other tablets is gained at the expense of therapeutic effectiveness—dihydroxy aluminum aminoacetate was used exclusively in the following study.

Material and Method of Study

One hundred forty-four patients with peptic ulcer were studied over a period averaging 8.5 months. This group was made up of 127 males and 17 females, ranging in age from 22 to 73 years with a mean age of 39.5. The average duration of symptoms was 10.8 years; the shortest was 1 year, the longest 35 years. Patients with pyloric obstruction were excluded. Sixty-three patients had a past history of hemorrhage; 13 per cent of the entire group had had multiple hemorrhages. Nine patients had had perforations which had been closed surgically. Each patient had a history and roentgen findings indicating peptic ulcer activity within six months preceding the study. The duration, frequency and severity of ulcer symptoms were determined at the beginning of treatment and were classified as mild, moderate, or severe. The symptoms were considered as mild in 14.8 per cent, moderate in 71.1 per cent, and severe in 14.1 per cent.

Medication used in the study consisted of 2 tablets identical in appearance—one containing DAA, the other a placebo. In addition to a bland diet, all patients were told to take 4 tablets two hours after each meal and at bedtime (a total of 16 tablets per day). Seventy-seven patients were given tablets containing DAA, and 67 were given the placebo. All patients were seen at intervals of one to three months, and in the majority of instances roentgen examinations were made at the beginning and at the termination of the study. The medication was given to the patients without cost. Neither the patient nor the physician knew which medication was the active preparation.

Final evaluation of results was based on the data recorded by the patients and on the clinical impression of the investigator at each follow-up visit. The results were classified as "good to excellent" (freedom from ulcer distress throughout the period of observation or improvement in spite of recurrence) or "fair to poor" (exacerbation, no change, or only slight improvement

Table 1
Effects of DAA on the Course of Peptic Ulcer

	Placebo	DAA
Daily dose	16 tablets	16 tablets
No. patients	67	77
Follow-up (months)	8.5	8.5
Results		
Good to excellent	24 %	74 %
Fair to poor	76 %	26 %
Recurrences		
None	12 %	50 %
Fewer and milder	14 %	24.5 %
Same or more	74 %	25.5 %
Complications		
Hemorrhage	5.9 %	5.2 %
Perforation	3.0 %	0 %
Obstruction	1.5 %	0 %
Surgery needed	3.0 %	0 %
Side Effects		
Oral (bad taste, dry or sore mouth)	5.9 %	7.5 %
Visual	7.4 %	5.2 %
Sphincter (bladder)	1.5 %	1.3 %
Constipation	11.9 %	20 %

with continued recurrences). Recurrences were classified as "none," "fewer and milder," "same or more."

Complications under treatment included hemorrhage, obstruction, perforation, and any other development necessitating surgery.

Results (Table 1)

Seven patients who were on DAA discontinued the drug—2 because of recurrences and a dislike for the taste, 1 who preferred previous medication, 3 because they were unimproved, and 1 because he was asymptomatic and did not wish to continue taking medication.

Twenty-nine patients who were taking the placebo discontinued it within the first six months—16 because of severe multiple recurrences of pain, 2 because of recurrences and a dislike for the taste, 4 because of massive hemorrhage (requiring gastric resection in one instance), and 1 because of pyloric obstruction.

Six of the patients who discontinued the placebo complained of a variety of side effects. Twenty-nine patients taking DAA reported mild constipation requiring no change in diet or therapy. As might be anticipated when the patients were filling out cards on which were noted symptoms referable to all systems, a few patients in each group listed minor complaints related to visual and sphincter disturbances.

Fifty per cent of the patients on DAA had no recurrences; 24.5 per cent had fewer or milder recurrences, and 25.5 per cent were unchanged or worse. In the group taking the placebo, 12 per cent had no recur-

rences during the interval of study; 74 per cent had as many or more.

While evaluation of subjective complaints, even with the help of objective findings, occasionally poses some difficulty, the occurrence of such complications as hemorrhage, perforation, and bleeding is unequivocal.

Hemorrhage occurred in 5.2 per cent of the patients on DAA and in 5.9 per cent of those taking the placebo. Pyloric obstruction developed in 1 of the patients in the placebo group; 2 patients in this group had perforations and required surgery.

Comment

Evaluation of the results of drug therapy in peptic ulcer is made more difficult by the fact that a high percentage of such patients will have prolonged remissions accompanying any form of treatment, even dietary management alone. In an effort to evaluate more accurately the effects of long-term therapy with an effective antacid, a controlled study based on prolonged observation over a period of months has been carried out, with careful records of the incidence of recurrence. It should be emphasized that the patients included in this study represent "problem cases," as is indicated by the duration of symptoms and by the previous history of hemorrhage or perforation in 50 per cent. Thirteen per cent gave a history of multiple hemorrhage prior to the beginning of treatment. A review of the literature indicates that the usual incidence of recurrence for peptic ulcer is 44 per cent within one year⁽⁴⁾. In the "problem patients" under study, however, a higher rate of recurrence and incidence of complications would be anticipated. In the group of patients receiving placebos, only 8 of 67 (12 per cent) were asymptomatic during the period of study, whereas 38 of 77 patients receiving antacid therapy with DAA (50 per cent) went through the period without a recurrence of ulcer activity. The percentage of patients who remained symptom free or noted marked improvement during the period of study was 74 in the group taking DAA, as compared with 24 in the group receiving the placebo.

Interestingly enough, the percentage of "good to excellent" results obtained in patients maintained on long-term continuous antacid therapy with DAA is essentially the same as that noted in a similar group of patients receiving continuous prolonged treatment with potent anticholinergic prepa-

arations administered in full therapeutic dosage⁽⁵⁾.

It is significant that the incidence of hemorrhage was the same among the patients receiving antacid therapy as in the placebo group. Studies with anticholinergic agents have shown this same lack of effect on the incidence of hemorrhage.

While prolonged continuous antacid therapy does not appear to be effective in preventing recurrence or complications of ulcer, the data indicate that an effective antacid providing rapid disintegration and prolonged activity in gastric juice, given midway between meals and at bedtime, is therapeutically beneficial.

Summary

One hundred forty-four patients with peptic ulcer, 50 per cent of whom had a past history of hemorrhage or perforation, were studied over an average period of 8.5 months. They were divided into two groups; the patients in one group received continuous antacid therapy, while those in the other group were given a placebo.

Fifty per cent of the patients taking DAA and only 12 per cent of the patients taking the placebo had no recurrence of symptoms during the interval of study. The percentage of "good to excellent" results obtained in patients on continuous long-term antacid therapy with DAA (74 per cent) is essentially the same as that previously noted in ulcer patients treated under similar conditions with potent anticholinergic drugs alone.

The development of complications was not prevented by continuous treatment, and the incidence of hemorrhage was the same in both test and control groups.

Continuous antacid therapy, while it appears to offer therapeutic benefits equal to those obtained with anticholinergic drugs, does not act prophylactically to prevent recurrences or complications of ulcer.

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Omphalocele of the Abdominal Viscera

A Case Report

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An omphalocele is a congenital herniation of the abdominal viscera into the base of the umbilical cord. The pouch is a thin translucent structure consisting only of peritoneum and amniotic membrane⁽¹⁾. This pouch usually contains small bowel, but may enclose the colon, pancreas, stomach, urinary bladder and all or part of the liver. It is a rather uncommon anomaly, present in 1:5,000 to 1:10,000 live births. The average size of the defect is 6 to 8 cm. in diameter. The size of the defect bears no direct relationship to that of the presenting mass.

From the sixth to the twelfth week in normal embryonic development, the celomic cavity expands forward into the base of the umbilical cord. The abdominal cavity grows at an accelerated rate after the twelfth week, and the organs are then drawn into it. If the disproportion continues after the twelfth week, there is interference with the fusion of the abdominal wall, and some of the abdominal contents remain herniated. During this same period fusion of the linea alba occurs first from the pubis to the umbilicus. This is followed by fusion from the umbilicus to the xyphoid. In large omphaloceles the lower abdominal wall is intact, while herniation occurs upward from the umbilicus⁽²⁾.

Eighty-eight cases have been treated at the Boston Children's Hospital. In about one half of these cases a portion of the liver was enclosed. The entire liver was rarely enclosed in this group. The mortality was 85 per cent when the defect was greater than 6 to 8 cm. in diameter or when the sac contained a large portion of the liver. The mortality rate was also affected by delay of surgery (regardless of the size of the omphalocele); a mortality of 12 per cent was reported for cases in which surgery was delayed for 24 hours, and 66 per cent for cases in which there was a 48-hour

delay. The factors associated with delay of surgery which increase the mortality rate are peritonitis, rupture of the membranes, and dehydration. Gross reported a higher survival rate concomitant with the use of antibiotics⁽³⁾.

The diagnosis of an omphalocele is obvious at birth. Nevertheless, associated anomalies have been found on careful physical examination in from 25 to 50 per cent of the cases. The most common are malrotation of the intestine, imperforate anus, and congenital heart disease.

Early repair is imperative. Adequate anesthesia may be achieved by means of local infiltration, but in most cases general anesthesia is preferred. The small defects may be closed easily in anatomic layers. The larger defects usually cannot be completely closed in this manner. The skin edges are undermined widely, leaving the omphalocele intact. The skin usually can be closed without tension over this defect. Patients may be allowed to go from 6 to 10 months before a second closure is performed. After several months the abdomen will enlarge adequately to permit complete closure. In these large defects postoperative management is immediately complicated by impairment of venous return, intestinal obstruction, and reduction of vital respiratory capacity due to crowding the lung from below. Management includes the use of oxygen and antibiotics, the maintenance of an adequate airway, intestinal decompression by a Levin tube, and the limitation of oral fluids. Hydration should be maintained by parenteral fluids until the patient is able to retain oral feedings. Small amounts of blood and plasma should be given when indicated.

This case is reported because of the extremely large size of the omphalocele, which contained the entire liver, stomach, and small and large intestines. The lack of

adequate skin to permit closure after wide undermining and the occurrence of a colonic fistula complicated the case.

Case Report

A white male infant weighing 6 pounds 10 ounces was delivered as a footling breech presentation at City Memorial Hospital, Winston-Salem, on January 20, 1957. This infant's mother was reported as gravida 1 para 0.

At delivery an omphalocele 10 cm. in size was immediately noticed. It was covered by a thin transparent glistening membrane, and contained the liver, intestines, stomach and colon.

Within an hour after delivery under general endotracheal anesthesia, the omphalocele was explored. The skin was dissected from the underlying wall and the organs were reduced with much difficulty because of the extremely large edematous liver protruding through the defect. The liver was not attached to any structure except the vena cava, common bile duct, hepatic vessels, and portal veins. The skin was closed over the defect with mattress sutures under much tension.

A complete blood count, urinalysis, and serologic test for syphilis were within normal limits at the time of birth. Postoperatively, the patient was placed in an Isolette and given nothing by mouth for 24 hours. He was given two 2.5 mg. doses of vitamin K and 200,000 units of penicillin twice daily intramuscularly. For three days after the operation green material was regurgitated, requiring the stomach to be aspirated. Subcutaneous fluids were given but poorly absorbed. A cutdown was done on lesser saphenous vein in the ankle and the intravenous administration of a 5 per cent dilution of Levugen #48 started. The patient was then started on 5 cc. of glucose in water given by mouth with a medicine dropper every three hours. Regurgitation recurred and intestinal obstruction due to excess abdominal fluid was suspected.

The patient was then placed on 13-26-3 milk formula and later on 13-18-3 at four hour intervals. On the fourteenth postoperative day rice cereal was started by mouth. This diet was increased slowly.

On the fourteenth postoperative day it was noticed that the skin was disrupting at the lower border of the suture line, and a definite fistula was found. The fistulous



Figure 1

portion of the colon presented in the disrupted portion of the abdominal wall. Following formation of the fistula the abdominal distention gradually subsided and regurgitation decreased. As soon as the incision was healed adequately, the dressing was changed to a loose group of 4 by 4 pads which were changed after each stool. The frequent change of dressing and the application of zinc oxide paste caused the raw irritated erythematous tissue surrounding the fistula to heal rapidly.

The infant began taking oral foods adequately. He gained in weight and length and showed general improvement. Two months after birth he was discharged from the hospital weighing 7½ pounds.

The patient was readmitted to the hospital at the age of 10 weeks for resection of fistula and a side-to-side anastomosis. Following this procedure marked distention developed, causing respiratory embarrassment. The abdomen was explored under local anesthesia and about 500 cc. of cloudy fluid was evacuated. No definite distended loop was found. Two fistulas developed proximal to the anastomosis, one of which has since closed. The patient is having an equal number of rectal and fistula exactions. One month after operation he was discharged from the hospital in fair condition, weighing 9 pounds and 12 ounces.

Summary

1. An omphalocele is a herniation of the abdominal viscera into the base of the umbilical cord. The lesion is uncommon, occurring 1:5,000 to 1:10,000 live births. The lesion is a defect of development occurring between the sixth and twelfth week of embryonic development.

2. The largest reported series indicates that delay in surgery, size of the defect, and presence of the liver in the omphalocele, sharply increase the mortality rate.

3. Early repair must be carried out since a 48 hour delay causes a 66 per cent mortality, regardless of the size of the lesion. Small omphaloceles may be closed in anatomic layers. The larger ones require a

two-stage procedure. Postoperative care must include specific pediatric management to prevent dehydration.

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Trimeprazine: An Adjuvant in the Management of Itching Dermatoses*

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and

SIDNEY OLANSKY, M.D.

DURHAM

The control of itching remains one of the most difficult problems in dermatologic therapy. Sedation, antihistamines given by mouth and topically applied, steroids systemically and topically applied, and a plethora of injections and local applications have been used unsuccessfully. A search continues for some type of systemic medication which will control itching centrally.

Trimeprazine (SKF)[†] has shown potent antipruritic qualities in the hands of certain American and French investigators. This compound belongs to a group containing the phenothiazine nucleus. These preparations have diverse pharmacologic effects including tranquilization, sedation, antagonism to histamine, and muscle relaxation. Serious reactions to trimeprazine have not been observed. The chief side effect, if indeed it is a side effect, is drowsiness.

Materials and Method

Trimeprazine was administered to 85 patients suffering from various dermatoses in which pruritus was the most prominent symptom.

Dosage and Administration: Trimeprazine was administered orally in 5 and 10 mg.

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*The Trimeprazine (Temaril) used in this study was supplied through the courtesy of Smith, Kline and French Laboratories, Philadelphia, Pennsylvania.

[†]Chemically, trimeprazine is *dl*-10(3-dimethylamino-2-methylpropyl) phenothiazine.

tablets, and more recently in children as a syrup containing 1 mg. per cubic centimeter. Routinely patients were started on one 5 mg. tablet after each meal and at bedtime. The dosage was varied according to the individual symptoms, response, and tolerance. In children, the syrup was used in doses ranging from $\frac{1}{2}$ to 1 teaspoonful ($2\frac{1}{2}$ to 5 mg.) four times daily.

Results

The results are outlined in table 1. For the purpose of this tabulation results were considered excellent if complete relief of itching was obtained; good, if itching was considerably diminished; fair, if some diminution of itching resulted; and poor, if there was no influence on the pruritus. With one exception, this drug brought some degree of relief from the itching.

In some patients the effect was striking. For example:

1. A patient with Hodgkin's disease who had had continuous itching and insomnia for days, was able to sleep 12 hours after one 10 mg. tablet and could completely control his pruritus by further use of the medication.

2. A patient with lichen planus and intense pruritus got complete relief from itching, although her lesions remained visibly unchanged.

3. Seven children with chicken pox got marked relief from pruritus. This result, in our experience, is unique.

The effect on atopic dermatitis in adults

Table 1
Results of Trimeprazine Therapy

Adults (12-47 years)		Excellent	Good	Fair	Poor
No. Cases	Diagnosis				
39	Atopic eczema (neurodermatitis)	8	23	8	
2	Urticaria		1	1	
5	Contact dermatitis	1	3	1	
2	Lichen simplex chronicus		2		
4	Lymphomas (varied)	2	2		
2	Dermatophytosis		2		
4	Pityriasis rosea	3	1		
3	Pruritus ani		1	1	1
1	Poikiloderma	1			
2	Senile pruritus	1	1		
2	Dermatitis herpetiformis		2		
5	Pruritus vulvae		4	1	
1	Stasis dermatitis		1		
Children (2-12 years)					
7	Chicken pox	7			
5	Atopic eczema	1	3	1	
85		24	46	13	1

and children was sufficiently promising to justify further trials with this and other related compounds.

Side Effects

The only side effect noted in this group was drowsiness. In general this effect can be overcome by adjusting the dosage, and in many tolerance increased as the medication was continued. Accidental overdosage may be controlled by using Benzedrine or Dexedrine, and where pressor agents are indicated Neo-Synephrine or Norepinephrine may be used.

Summary and Conclusions

1. A preliminary report has been made on the use of Trimeprazine orally in a group of 85 patients suffering from pruritic diseases.
2. Trimeprazine has been effective in controlling the symptom of itching in this series of patients.
3. Side effects have been minimal, but drowsiness has been observed. This effect usually responds to alteration of dosage and diminishes as the drug is continued.
4. Trimeprazine is a promising oral antipruritic agent. Further experience with it and similar agents seem justified.

Particularly from the time of the Greeks, the professors of medicine and the ministry separated, to the point that in the Middle Ages there was a regrettable conflict in many points between science and religion. Most encouraging, however, is the fact that in recent decades these two groups have displayed parallel and mutual objectives and have recognized overlapping interests and responsibilities. Incidentally, medical history is replete with outstanding examples of men of science, particularly physicians, who have unashamedly avowed a simple faith in God and in His work in the creation and the maintenance of the world and the inhabitants thereof. It is my humble opinion that any physician who has studied with an open mind the wonderful construction and function of the human body and the unmistakable evidence of the relationship of spiritual and mental factors on the function of the human body comes to the inevitable conclusion that a Supreme Power and design is behind the world.—Rouse, M. O.: Spiritual Allies in Medicine, Texas J. Med. 53:382 (June) 1957.

Diagnosis and Treatment of Atopic Dermatitis In Infants and Children

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The term "eczema" still defies accurate definition. Hebra, the father of modern dermatology, is said to have inferred that "eczema is what looks like eczema." Many authorities feel that this view is just as apropos today. Certainly the word is popular with the lay public, who has given it a multiplicity of meanings. Wise and Wolfe⁽¹⁾ have described eczematous eruptions as "characterized by polymorphous lesions consisting of erythema, scaling, papules, vesicles, and at times lichenification, accompanied by more or less itching."

From the standpoint of allergy, the eczematoid dermatoses of infancy can be classified as so-called atopic dermatitis and contact dermatitis. There has been considerable objection to the term "atopic" in some quarters, although most authorities agree that the word represents the only unmistakable term for this form of eczema, whether one agrees with Coca's concept of atopy or not⁽²⁾. In any event, it is the most important skin disease of infancy and childhood. Contact dermatitis, on the other hand, is somewhat less frequently encountered in pediatric patients, possibly because of the lower incidence of topical sensitization in this age group as compared to adults.

Definition

Atopic dermatitis is the skin condition commonly termed "infantile eczema," or "allergic eczema," or even "simple eczema." According to Hill⁽³⁾, it can begin at any age, but not commonly before the age of 3 months; "eczema" before this age, he feels, probably represents seborrheic dermatitis. The usual course is characterized by onset at the age of 3 months, persistence for the first two or three years of life, and occasional exacerbations until the age of 6 years.

Signs and Symptoms

The clinical picture may or may not be characteristic. In the younger infant, the

eruption will frequently appear first on the face as a papular, patchy process, with rather marked excoriation. Many of these babies will exhibit "cradlecap" as well as the other signs of seborrheic dermatitis, and often there is gradual evolution into the atopic state. In patients 1 year of age or older, the initial involvement may be noted in the flexural areas.

Even in those cases where the eruption begins on the cheeks, later involvement tends to occur in a so-called flexural pattern, and the child may continue to exhibit such a flexural dermatitis for many years.

Glaser⁽²⁾ has described four principal stages in the development of the acute and subacute forms of atopic dermatitis:

1. Congestive stage characterized by simple reddening of the skin and sometimes called *erythematous eczema*
2. Vesicular eczema characterized by minute intra-epidermal vesicles
3. Moist or weeping eczema
4. Crusting eczema due to the drying of the serum on the skin.

Diagnosis

The diagnosis is by no means easy in many instances, since each case varies greatly individually. Careful observation of a given patient over a period of two or three office visits, however, usually clarifies the problem. The family history of allergic disease is an important clue. Other dermatoses which must be ruled out include seborrheic dermatitis, dermatitis medicamentosa, dermatitis herpetiformis, and papular urticaria. A differentiation between atopic dermatitis and seborrheic dermatitis is often particularly difficult. In general, however, the latter is characterized by a yellow, greasy scale especially on the scalp, less itching or excoriation, and more rapid response to treatment. As mentioned previously, these two conditions may and often do occur together.

Virtually every mother of a child with atopic dermatitis becomes convinced sooner or later that a battery of skin tests will absolutely solve the problem and that the

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case can be permanently closed thereafter. Nothing could be further from the truth. Actually a carefully obtained history offers more possibility of a good clue to the youngster's cutaneous difficulties than do skin tests. Moreover, on occasion actual harm has been done by attempting to follow rigidly positive skin tests by dieting. It cannot be overemphasized that positive skin tests are not infallible, and that what actually happens when a specific food is ingested is more important. Nevertheless, skin testing is often a valuable procedure, especially as an aid in planning treatment, when one fully recognizes its limitations. Certainly the performance of a large number of tests is unnecessary. We usually do a selected few, first by the scratch method and then by the intracutaneous route. Passive transfer tests have proved so unwieldy that they are no longer used to any degree. Hill⁽³⁾ points out in his recent series of articles on the subject that he finds himself doing less and less skin testing, and that his patients seem to do just as well as when complete testing was done on every patient.

Treatment

The treatment of atopic dermatitis remains a perplexing problem in too many instances. One of the first and perhaps more important considerations is the establishment of rapport with the parents, and an initial unhurried 30-minute interview often proves to be of inestimable value. Many authorities consider this interview to be an absolute prerequisite to successful treatment. The problem should be discussed at length with the parents and an effort made to explain in simple terms just what the patient and parents as well as the physician are up against.

Simple elimination of a very few foods proves rewarding, although any drastic change is unwise and unnecessary except in the unusual case. On the other hand, a few men who have studied this aspect of the problem insist that foods play little part and advise a return to a full diet⁽⁴⁾. The avoidance of contact with wool and other irritating substances such as house dust is important. Moreover the skin should not be bathed with soap and water, because of the resulting irritating and drying effects.

Starch or oatmeal or simple olive oil can be used for removing scales and crusts.

The advent of the topical steroid preparations has been of great help in controlling the intensely pruritic acute case. These ointments and lotions can apparently be applied even over large areas with little risk of any toxic effect except to the pocketbook. We have recently been using a new ester of hydrocortisone acetate called ethamicort (Magnacort—Pfizer) which in our hands has proved effective and more economical. As the inflammatory process subsides, a tar lotion or ointment might be considered for its keratolytic and antipruritic effect. A new preparation which we like is Metashal Ointment and Lotion (Stiefel), made from Colorado shale rock. It seems to be particularly effective in many cases of atopic dermatitis. A host of other bland topical preparations have been applied with benefit. The topical use of the antihistaminic drugs is hazardous because of the risk of sensitization, and probably should be avoided altogether.

Systemically, the antihistamines have proved disappointing, although they are quite useful in some cases as soporifics; Phenergan (Wyeth) and Benadryl (Parke, Davis) are two drugs that may prove of merit in this respect. Steroids given systemically are occasionally necessary in severe cases when other measures fail. We are extremely conservative in utilizing these drugs internally. The "rebound phenomenon," or worsening, upon withdrawal of the drug is truly disheartening.

Summary

An attempt has been made to review some of the problems encountered in atopic dermatitis, which is still the one condition that bedevils the pediatrician most. In view of the uncertainty about this dermatosis, it is not surprising that results on most counts have been far from satisfactory.

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Allergic Stomatitis

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Since Dodd and Ruchman⁽¹⁾ stated with suggestive evidence that recurrent ulcerations in the mouth are not caused by the virus of herpes simplex, there has been increasing need for a more comprehensive study of allergic factors. Recurrent aphthae or canker sores form a small but important part of the diverse disease manifestations of the oral mucosa that may have an allergic basis. With this in mind, it is felt that a brief review of the allergic diseases is indicated.

Etiology

A discussion based on anatomic location would have less meaning than one based on the method of sensitization—that is, direct contact or hematogenous sensitization. Nevertheless, the site of mucosa involved may be helpful as in the case of cheilitis, which is most commonly caused by the dye in lipsticks⁽²⁾ and less so by such allergens as tobacco, dental plates, or lozenges.

Hypersensitivity responses of the contact type are the most frequently encountered. Of increasing significance is the type caused by the use of improperly “cured” plastic dental plates⁽³⁾. A “cured” denture is one in which complete polymerization has been effected by heating the liquid monomer of acrylic resin with its powdered polymer. Patients often experience an improvement in symptoms which comes from the removal of plates at night.

The symptomatology of contact dermatitis may follow the use of dental powders or pastes, chewing gum, food, or antiseptic mouth washes (“Baxin”)⁽⁴⁾. The lesions are produced by coloring and flavoring materials, plant oils, and fatty acids⁽⁵⁾. One of us (B.B.P.) has seen 2 cases of contact lesions of the mouth following the chewing of poison ivy stems by mistake in winter. The inhalation or ingestion of foreign proteins are second in frequency to contact, with the foods predominating. Most important are wheat, eggs, fish, cheese, chocolate, milk, and fruit. Mucosal lesions due to drugs such as penicillin⁽⁶⁾ are increasingly seen in practice. The pollen of grasses and flow-

ers are the significant inhalants; less important are the bacterial allergies.

Urticaria and angioneurotic edema as a group are more serious reactions because of the inherent danger of laryngeal swelling. The allergens to be considered here are fish, berries, cheese, drugs, serum, bacterial toxins, and cold temperatures.

Signs and Symptoms

The patient often complains of swelling of the oral mucosa, tenderness, burning, itching, “scratchy feeling,” and difficulty in swallowing, depending on whether the lesion is edematous, erythematous, desquamated, vesicular, bullous, or ulcerated. Frequently associated with urticaria and angioneurotic edema are fever, nausea, vomiting, and diarrhea occurring with more severe and widespread involvement.

Diagnosis

Of the utmost importance is a good history followed by a complete physical examination, including routine blood studies and urinalysis, in search of chronic lowgrade infection such as sinusitis, periostitis (alveolar), cholecystitis, and prostatitis. Other allergies of the gastrointestinal tract, skin, and respiratory tract are often associated and must be treated also. Skin tests and tests on the oral mucosa, although far from being always definitive and often negative, are sometimes indicated. Elimination diets and provocative testing are a part of the diagnostic studies, and no substance should be incriminated until proven by the latter methods. In these cases the medical sleuth has no substitute.

Treatment

The ultimate in successful treatment is removal of specific allergens. But until symptoms subside, immediate relief in the form of nonirritating and protective medications may be necessary. Warm sodium bicarbonate or saline solution, alkaline aromatic solution, and the quaternary ammonium compounds make useful mouth washes. Silver nitrate (5 per cent) and camphorated medicants may relieve the pain

of ulceration. The use of steroids may alleviate discomfort, but they should not be used without thorough investigation of etiology. Antihistaminic therapy is disappointing, but may have moderate effect in reactions caused by drugs or pollens.

Summary

Allergic disease of the oral mucosa is uncommon, but there is need to focus more attention on this elusive pathologic state. A brief summary of etiology, signs and symptoms, diagnostic methods, and treatment has been given.

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Primary Ovarian Abscess

Report of a Case

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CHARLOTTE

Nearly all inflammatory lesions of the ovary are secondary to inflammation of the tube with which the ovary is in intimate contact. The most frequently encountered evidence of inflammatory involvement of the ovary is merely a chronic perioophoritis. The primary tubal infection, however, may be severe enough to involve the ovaries more extensively, even to the point of abscess formation.

Aside from infections spread by continuity or contiguity, probable hemotogenous infections occur in rare instances. Such a process is described in textbooks, but, judging from the scarcity of cases in the literature, the incidence is extremely low. For this reason, the following case is of particular interest.

Case Report

First admission

A 37 year old housewife, para 2-0-2, was admitted to the Medical Service on July 19 with the complaints of fever, malaise, anorexia, and intermittent headaches of about three weeks' duration. The onset of these symptoms had been gradual, with no acute episode such as a shaking chill or severe abdominal pain. There were no gastrointestinal or urinary complaints. The patient had had an entirely normal menstrual period about 8 to 10 days after the onset of illness.

Seven days prior to admission the patient had been given oxy-tetracycline for 72 hours, and two days prior to admission 300,000 units of penicillin had been given intramuscularly, but her symptoms remained unchanged. On admission the temperature was 100 F. and the pulse 96. She obviously had been ill, but did not appear toxic or in any acute distress.

A general physical examination was essentially negative. On pelvic examination she was found to have an irregular, firm, nontender mass on the left posterolateral surface of the uterus. This mass was difficult to outline, but was approximately 5 by 6 cm. and was thought to represent only an incidental finding associated with a sessile subserosal leiomyoma. Gynecologic consultation soon after admission agreed with this opinion.

An extensive diagnostic survey was begun. Blood cultures, serial agglutination tests for febrile illnesses, heterophile antibody agglutinations, stool examinations, stool cultures, urine cultures, an L.E. cell test, malarial smears, a chest roentgenogram, and an electrocardiogram were all negative. Intravenous and retrograde pyelography showed minimal hydroureter and hydronephrosis on the left.

The febrile course continued, with evening elevations ranging from 100 to 102 F. Repeated white blood cell counts showed a leukocytosis ranging from 14,000 to 18,000.

with the percentage of polymorphonuclear leukocytes varying from 70 to 85 per cent. No treatment was instituted until the fourth hospital day, pending the results of the diagnostic procedures. At that time streptomycin and massive penicillin therapy were begun empirically. There was no response. Erythromycin, tetracycline, and chloramphenicol were then added, with the same poor response.

A follow-up gynecologic examination 10 days after admission revealed the first significant change. The mass, which had been thought to be a leiomyoma on the first examination, had almost doubled in size and was definitely separated from the uterus. It was still completely nontender, firm, and movable. Because of this rapidly enlarging adnexal mass, laparotomy was advised; but the patient, for personal reasons, insisted on being discharged and re-admitted two weeks later.

Second admission

By the time of the second admission the mass was easily palpable abdominally, arising out of the left lower quadrant, extending across the mid-line and up to within four fingerbreadths of the umbilicus. Sigmoidoscopy and barium enema revealed only evidence of extrinsic pressure.

On August 19, four weeks after her first admission and seven weeks after the onset of illness, laparotomy was performed. A large cystic mass, approximately 12 to 14 cm. in its greatest dimension, was found arising from the left adnexa. Loops of small and large bowel were attached by thin adhesions. The mass was adherent

to the posterior surface of the uterus and to the lateral and posterior pelvic wall. The left tube was embedded in a rather edematous broad ligament, but otherwise appeared uninvolved. The cyst contained a brown serous fluid with a slightly foul odor. Unfortunately no culture was obtained. The lining of the cyst was roughened, hyperemic, and focally gray in color. The right adnexa appeared normal. Because the purely inflammatory nature of the process was uncertain, however, and because of the possibility of ovarian malignancy, a right salpingoophorectomy and total hysterectomy were done along with the left salpingoophorecystectomy.

Pathology

The pathologic report showed the cystic ovarian structure to be lined with granulation tissue, infiltrated by a great variety of small mononucleated round cells, as well as foam cells. Portions of the wall were made up of somewhat edematous hyalinized connective tissue. Additional sections were studied, and, because infrequent focal accumulations of giant cells were found, periodic acid fungus stains were made but were not contributory. The adjacent tube presented mucosal folds which were slightly broadened but not adherent, and which exhibited a diffuse infiltration, mainly with foam cells. This was thought to represent only mild chronic histologically nonspecific salpingitis.

The diagnosis was a primary ovarian abscess. Complete recovery followed its removal.

Students of history readily acknowledge that the teachings of Christianity, in which are emphasized the dignity and the worth of every individual, have had most to do with the development of the true principles of democracy, in which the rights and privileges of every individual are upheld. In recent decades, there has been a tragic tide toward the subjugation of the rights of the individual to the ever encompassing encroachment of central authority or power—a "creeping paternalism" under the guise of the so-called "welfare state"—that bids fair to wipe away the rights of the individual "little men." I trust that it will not be regarded as sacrilegious when I point out that the medical profession in the United States is one profession that has up to now remained a bulwark in opposing this trend toward centralization of power.—Rouse, M. O.: *Spiritual Allies in Medicine*, Texas J. Med. 53:384 (June) 1957.

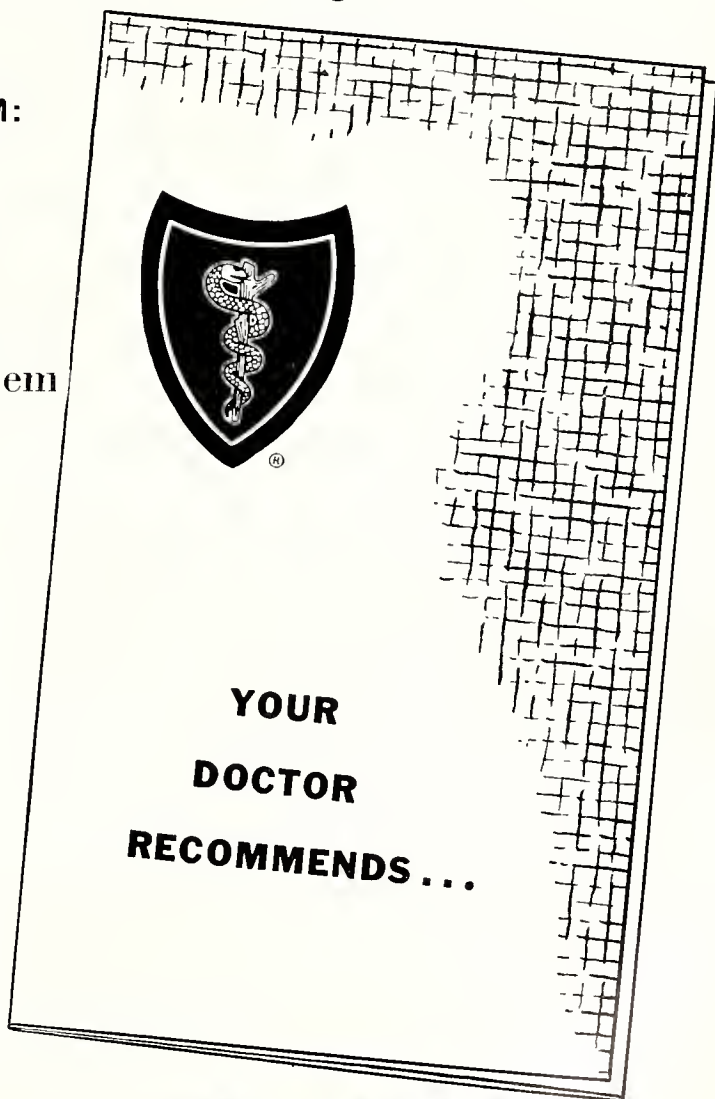
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(1) Boger, W. P.; Strickland, C. S. and Gylfe, J. M.: *Antibiot. Med. & Clin. Ther.* 3:378 (Nov.) 1956.

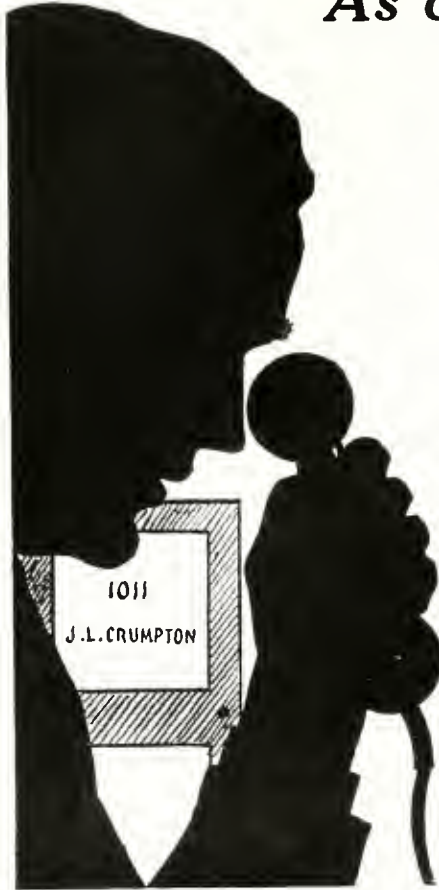
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"The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration. Whoever chooses this profession assumes the obligation to conduct himself in accord with its ideals"—Principles of Medical Ethics of the American Medical Association, Chapter 1, Section 1.

AUGUST, 1957

NEW A.M.A. PRINCIPLES OF MEDICAL ETHICS

The American Medical Association's one hundred sixth annual meeting in New York was one of the most important ever held. An all-time record for attendance was set with 19,469 physicians—nearly 4,000 more than the centennial meeting in Atlantic City in 1947.

One reason why this meeting was so important is that, after long and careful study, a complete revision of the Principles of Medical Ethics was adopted. In keeping with the times, it is much shorter than the old principles. The final version consists of a preamble and 10 sections. These are brief enough and important enough to be given in full:

These principles are intended to aid physicians individually and collectively in maintaining a high level of ethical conduct. They are not laws but standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public.

SECTION 1.—The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man. Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

SECTION 2.—Physicians should strive continually to improve medical knowledge and skill and should make available to their patients and colleagues the benefits of their professional attainments.

SECTION 3.—A physician should practice a method of healing founded on a scientific basis, and he should not voluntarily associate professionally with anyone who violates this principle.

SECTION 4.—The medical profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession, and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession.

SECTION 5.—A physician may choose whom he will serve. In an emergency, however, he should render service to the best of his ability. Having undertaken the care of a patient, he may not neglect him, and unless he has been discharged he may discontinue his services only after giving adequate notice. He should not solicit patients.

SECTION 6.—A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care.

SECTION 7.—In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies, or appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient.

SECTION 8.—A physician should seek consultation upon request, in doubtful or difficult cases, or whenever it appears that the quality of medical service may be enhanced thereby.

SECTION 9.—A physician may not reveal the confidences entrusted to him in the course of medical attendance, or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community.

SECTION 10.—The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community.

* * *

CIGARETTE SMOKE AND LUNG CANCER

The controversy as to whether or not cigarette smoke predisposes to lung cancer continues, often with more heat than light. Statistical studies by Drs. Doll and Hill, for the British Medical Research Council, and Drs. Hammond and Horn, statisticians of the American Cancer Society, indicated that the great majority of deaths from lung cancer were in cigarette smokers, especially in those smoking more than a pack a day.

The *Reader's Digest* has had two articles (July and August) supporting the thesis that cigarette smoking predisposes to lung cancer. Other publications have joined in the fray. Congress has been conducting a study of the question, with special reference to the advertising claims made for filter cigarettes.

Although this JOURNAL is naturally suspected of bias in discussing the question, since tobacco growing and manufacturing are so important in North Carolina's economy, it is only fair to note that strong voices are being heard on the other side of the controversy. A number of eminent authorities question the validity of the Hammond-Horn and the Doll-Hill reports. They contend that the studies are purely statistical and that they may well illustrate the fallacy of the *post hoc, propter hoc* reasoning.

Some years ago milk was incriminated as a cause of cancer on a statistical basis—because cancer was much more common in countries where a great deal of milk was used than in Ceylon and Japan, where the consumption was low. The fact was overlooked that most of the people in the latter

countries did not live long enough to reach the cancer age.

There are many other possible factors in the increased number of lung cancer cases reported, besides the improvement in diagnostic methods. Among these are the tremendous increase in exhaust gases from gasoline and Diesel engines; the dense "smog" that afflicts many cities; the soot from coal burning furnaces; and the tar used in our roads.

This JOURNAL pointed out more than three years ago (February, 1954) that the tobacco companies themselves were largely to blame for the public apprehension about cigarettes, because of their advertising methods. Since then, it must be admitted, they have modified their advertising, although much is still to be desired. The most constructive action they have taken is the formation and financing of the Tobacco Industry Research Committee, which has the avowed aim of determining what, if any, carcinogens are present in cigarette smoke, and, if found, to see what can be done to get rid of them.

The chairman of the Committee is Dr. Clarence Cook Little. His reputation for integrity, ability and knowledge of cancer insure that the research will not be a whitewash affair, but an honest effort to learn the truth.

Until the facts are known, it is only fair to suspend judgment in such an important matter.

* * *

THE RELATIVE EFFICIENCY OF TRANQUILIZING DRUGS

The *British Medical Journal* for July 13 records an extremely interesting clinical research on the effectiveness of five tranquilizing agents as judged by a group of patients. Four of these drugs were modern. The fifth was "Amylobarbitone"—the British name for amobarbital or amytal. A placebo (lactose) was used for comparison.

The patients selected from the Outpatient Department of St. George's Hospital all had tension as one of their main symptoms "and were comparable to those patients for whom sedation is commonly and properly prescribed in general practice." The patients were divided into six nearly equal groups and those in each group were given for two-week periods each of the five drugs and the placebo—in rotation. The patients

were asked to record daily how they themselves believed they had responded to the drug. Five opinions were to be checked: No effect, good effect, very good effect, poor effect, and very poor effect. Only the druggist knew what drugs each group of patients was getting.

The experiment started with only 79 patients, but for one reason or another 28 dropped out and there were 51 finalists. The response to the scores was as follows: Very good effect plus 2, good effect plus 1, no effect 0, poor effect minus 1, very poor effect minus 2. The 14 responses for each drug were averaged to give a single figure.

It is quite interesting to note that the drug which scored highest was Amylobarbitone. This should be of especial interest in view of the high cost of living, since it was the cheapest of all the group—not excluding the placebo.

* * *

CONSTRUCTIVE CRITICISM, EXCLUSIVELY*

A few weeks ago the nationally syndicated newspaper columnist Mr. Sidney J. Harris declared that he couldn't understand why doctors refrain from criticizing one another, and he actually said that he thought something might be gained if physicians were to tell their patients — as tradesmen sometimes tell their customers and as the practitioners of some of the other professions sometimes tell their patients or clients — that whoever last served them made some unforgivable mistake.

Mr. Harris' suggestions were by no means original. All of us have heard or read them time and time again. But they are none the less completely wrong.

Would it serve any really useful purpose for a citizen who knows — and indeed aspires to know—little more about plumbing than that water usually runs downhill to hear one plumber find fault with the job that another plumber has done? And would it be helpful for a patient to hear from a dentist that his bridge was poorly designed or that the wrong material was used for his fillings? Since in each instance there would be no question of the excellence of the predecessor's intentions, would it not be better for plumber to talk to plumber and dentist to dentist, just as doctors talk only to doctors, about the ways by which they may be able to improve their work.

Physicians do an absolute minimum of backbiting, but they certainly do engage in constant, constructive criticism of themselves. In most hospitals there are tissue committees that watch for surgeon's mistakes. Most state medical societies and virtually all specialty groups publish journals in which they print clinical reports that serve to disseminate knowledge of new techniques, evaluate both old and recently introduced medications, and keep track of the progress—or lack of it—that is occurring in the treatment of specific diseases.

. . .

Tradesmen and the practitioners of other professions doubtless do what they can to analyze their work and to exchange ideas for improving it. But Medicine unquestionably spends more time—and money—on such activities than does any other group, bar none!

Thus, doctors do criticize themselves, and they do criticize one another. If Mr. Harris isn't aware of the fact, he merely hasn't taken the trouble to find out.

*Reprinted from the Journal of the Iowa State Medical Society, June, 1957.

* * *

A UNIVERSAL PRAYER

Dr. Elmer Hess closed his farewell presidential address at the opening session of the House of Delegates with the universal prayer which he had used often before. He truly said that it fits mankind, regardless of what may be his religious affiliations. The prayer was so impressive that it is quoted in full:

Lord, make me an instrument
of your Peace
Where there is hatred let
me sow love
Where there is injury
pardon
Where there is despair
hope
Where there is darkness
light—and
Where there is sadness
Joy.

O Divine Master, grant that I may not so much seek to be consoled as to console, to be understood as to understand; to be loved as to love, for it is in giving that we receive, it is in pardoning that we are pardoned, and it is in dying that we are born to eternal life.

President's Message

MEDICINE AND AGRICULTURE

In an address delivered at the University of Pennsylvania on February 7, 1789, Dr. Benjamin Rush urged young physicians to establish themselves on farms. His reasons were as follows:

1. It will show the country people that the physician assumes no superiority over them because of his education and that he will share their toils and thus prevent envy.

2. The physician may serve his country by promoting improvements in agriculture, especially since chemistry is a subject of importance to both medicine and agriculture and some of the most important books on agriculture have been written by physicians.

3. Attending to the farm will furnish employment during the healthful seasons of the year and prevent the formation of bad habits such as dram or grog drinking.

4. Farming will create an independence so as to prevent performing unnecessary service to patients.

5. Payment for services may be made at times in farm commodities.

6. The resources of a farm will prevent an impious wishing for sickness in the neighborhood during the healthful season.

In the ensuing years when medical practice began to afford more abundant opportunities in urban centers, physicians began to shun the rural areas. Not until it was realized that physicians would not settle in the country until opportunities for a better type of practice including hospitals, clinics and nursing service were provided could this condition be remedied.

That the problems in medicine and agriculture are similar in many ways was brought out in an excellent address by Mr. Charles Shuman, president of the American Farm Federation, before the Conference of Presidents and State Society Officers in New York last June.

Mr. Shuman commented that medical schools now realize the need of training general practitioners and nurses for rural areas. He urged better health education in schools—especially better courses in nutrition—and stated that rural health programs have been of great benefit. It has been estimated that 40 per cent of our population of 170,000,000 persons eat no breakfast at all. All nutritionists agree that breakfast is a most essential meal for the maintenance of good health. Moreover, there are many eggs to be sold, and if these people would eat breakfast, it would relieve the surplus.

As in medicine, improvement in agriculture has been rapid, and efficiency is up 70 to 80 per cent. Government interference however, has been harmful. There is need for competitive markets and a free choice system.

The socialistic trend tends to throttle agriculture as it does medicine. Freedom to accumulate capital is essential to progress, and the high cost of government is the enemy of capital accumulation.

In our country 33 per cent of our income goes for the cost of government, in England 51 per cent, Sweden 74 per cent, and Russia about 80 per cent.

The present socialistic trend has progressed through Democratic and Republican administrations. At present 25 per cent of all agriculture looks to the government for market. That this is unhealthy is shown by the fact that the worst losses have been in those crops with which the government has had most to do.

Probably Dr. Rush never realized the problems such as income tax, government ownership, and creeping socialism that would confront students in the years to come.

EDWARD W. SCHOENHEIT, M.D.

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 John W. Nance, M.D., (3rd), 120½ Main Street, Clinton
 B. E. Stephenson, M.D., (4th), P. O. Box 206, Rich Square
 Marion B. Pate, Jr., M.D., (5th), Box 326, St. Pauls
 James Donald Bradsher, M.D., (6th), Box 168, Roxboro
 Wm. F. Eckbert, M.D., (7th), P. O. Box 317, Cramerton
 Henry B. Perry, Jr., M.D., (8th), 344 N. Elm Street, Greensboro
 Charles M. Kendrick, M.D., (9th), 351 Mulberry St., Lenoir
 Rachel D. Davis, M.D., Consultant, 111 E. Gordon Street, Kinston
- 22. Committee on Blue Shield (9)**
 Jacob H. Shuford, M.D., Chairman, 7 Main Avenue, S. W., Hickory (term expires 1959)
 W. Z. Bradford, M.D., 1509 Elizabeth Avenue, Charlotte (term expires 1958)
 Robert W. King, M.D., 107 Bradford Avenue, Fayetteville (term expires 1959)
 Willard C. Goley, M.D., 214 N. Marshall Street, Graham (term expires 1959)
 John Hoskins, M.D., 203 Doctors Bldg., Asheville (term expires 1960)
 O. Norris Smith, M.D., 1019 Professional Village, Greensboro (term expires 1958)
 Louis C. Roberts, M.D., 1200 Broad Street, Durham (term expires 1960)
 James P. Rousseau, M.D., 1014 West Fifth Street, Winston-Salem (term expires 1958)
 Louis L. Klostermyer, M.D., 103 Doctors Bldg., Asheville (term expires 1960)
- 23. Committee to Arrange Facilities for Annual Session (3)**
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 Theodore S. Raiford, M.D., 301 Doctors Bldg., Asheville
 Joshua F. B. Camblos, M.D., 500 New Medical Bldg., Asheville
- 24. Committee on Military and Emergency Medical Service (8)**
 George W. Paschal, Jr., M.D., Chairman, 311 Lands Bldg., Raleigh
 Chauncey L. Royster, M.D., Co-Chairman, 707 W. Morgan Street, Raleigh
 John P. Bond, M.D., 155 S. York Street, Gastonia
 H. Mack Pickard, M.D., 7 N. 17th Street, Wilmington
 George C. Rowe, M.D., 10 S. Logan Street, Marion
 George A. Watson, M.D., 306 S. Gregson Street, Durham
 J. Kingsley MacDonald, M.D., 1524 Harding Place, Charlotte
 M. J. Hornowski, M.D., 306 Doctors Bldg., Asheville
- 25. Committee on Medical Society Headquarters Facilities (20)**
 Alexander Webb, Jr., M.D., Chairman, 221 Bryan Bldg., Raleigh
 Malory A. Pittman, M.D., Wilson Clinic, Wilson
 Frederick C. Hubbard, M.D., Box 30, North Wilkesboro
 Harry L. Brockmann, M.D., 624 Quaker Lane, High Point
 Wm. M. Coppridge, M.D., 1200 Broad Street, Durham
 Elias S. Faison, M.D., 1012 Kings Drive, Charlotte
 James P. Rousseau, M.D., 1014 West Fifth Street, Winston-Salem
 Ross S. McElwee, Jr., M.D., 1012 Kings Drive, Charlotte
 Warner L. Wells, M.D., UNC School of Medicine, Chapel Hill
 A. Hewitt Rose, Jr., M.D., 2009 Clark Avenue, Raleigh
 James Kent Rhodes, M.D., 307 Woodburn Road, Raleigh
 Charles I. Harris, Jr., M.D., Martin General Hospital, Williamston
 Julian M. Ruffin, M.D., Duke Hospital, Durham
 Robert M. McMillan, M.D., 140 S. W. Broad Street, Southern Pines
 Newsom P. Battle, M.D., 404 Falls Road, Rocky Mount
 Hunter McG. Sweaney, M.D., 1200 Broad Street, Durham
 Isaac E. Harris, Jr., M.D., 1200 Broad Street, Durham
 David G. Bunn, M.D., East Main Street, Whiteville
 William A. Hoggard, Jr., M.D., 1502 Carolina Avenue, Elizabeth City
 Alan F. Scott, M.D., Barker Street, Salisbury
- 26. Committee on Constitution and By-Laws (5)**
 Roscoe D. McMillan, M.D., Chairman, Box 232, Red Springs
 Moir S. Martin, M.D., 314 Cherry Street, Mt. Airy
 J. Stuart Gaul, Sr., M.D., 315 Professional Bldg., Charlotte
 Louis DeS. Shaffner, M.D., 300 S. Hawthorne Road, Winston-Salem
 William G. Spencer, Jr., M.D., 301 West End Avenue, Wilson
- 27. Committee on Grievances (5)—1st five past presidents**
 J. Street Brewer, M.D., Chairman, P. O. Box 98, Roseboro
 Donald B. Koonce, M.D., Secretary, 408 N. 11th Street, Wilmington
 James P. Rousseau, M.D., 1014 West Fifth Street, Winston-Salem

- Joseph A. Elliott, Sr., M.D., 1012 Kings Drive, Charlotte
- Zack D. Owens, M.D., Medical Bldg., Elizabeth City
28. **Committee on Eye Care and Eye Bank (7)**
 Alan Davidson, M.D., Chairman, Box 1313, New Bern
 Wm. Banks Anderson, M.D., Co-Chairman, Box 3802, Duke Hospital, Durham
 Horace M. Dalton, M.D., 400 Glenwood Avenue, Kinston
 J. David Stratton, M.D., 1012 Kings Drive, Charlotte
 Edward E. Moore, M.D., 706 Flatiron Bldg., Asheville
 Edwin Hale Thornhill, M.D., 720 W. Jones Street, Raleigh
 Walter C. Humbert, M.D., Box 726, Greenville
29. **Committee of Physicians on Nursing (8)**
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 David T. Smith, M.D., Duke Hospital, Durham
 Moir S. Martin, M.D., 314 Cherry Street, Mt. Airy
 Vernon H. Youngblood, M.D., Rt. 8, Kannapolis-Concord Highway, Concord
 Wm. G. Spencer, Jr., M.D., 301 W. End Avenue, Wilson
 W. Reece Berryhill, M.D., UNC School of Medicine, Chapel Hill
 W. D. James, Jr., M.D., Hamlet Hospital, Hamlet
 Nursing and Nursing Education—Subcommittee
 David T. Smith, M.D., Chairman, Duke Hospital, Durham
 Nursing Careers—Subcommittee
 Mark McD. Lindsey, M.D., Hamlet Hospital, Hamlet
 Improvement of the Care of the Patient—Subcommittee
 David T. Smith, M.D., Duke Hospital, Durham
 Harry L. Brockmann, M.D., 624 Quaker Lane, High Point
30. **Committee on Archives of Medical Society History (4 members, 3 consultants)**
 James P. Rousseau, M.D., Chairman, 1014 West Fifth Street, Winston-Salem
 Wingate M. Johnson, M.D., 300 S. Hawthorne Road, Winston-Salem
 G. Westbrook Murphy, M.D., Doctors Bldg., Asheville
 Paul F. Whitaker, M.D., 1205 N. Queen Street, Kinston
 Wilburt C. Davison, M.D., Consultant, Duke Hospital, Durham
 Coy C. Carpenter, M.D., Consultant, Bowman Gray School of Medicine, Winston-Salem
 James B. Bullitt, M.D., Consultant, Medical Bldg., Chapel Hill
31. **Committee on Credentials of Delegates to House of Delegates (4)**
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 Edward S. Bivens, M.D., Stanly County Hospital, Albemarle
 T. Tilghman Herring, M.D., Wilson Clinic, Wilson
 James T. Littlejohn, M.D., 406 Doctors Bldg., Asheville
32. **Committee on General Practitioner Award (4)**
 Ben H. Kendall, M.D., Chairman, Shelby Medical Center, Shelby
 Wm. A. Sanis, M.D., Box BB, Marshall
 John C. Grier, Jr., M.D., Carthage Road, Pinehurst
- J. Grover Raby, M.D., 300 St. Patrick Street, Tarboro
33. **Nominating Committee**
 Wm. H. Romm, M.D., First Medical District, P.O. Box 1, Moyock
 Ben F. Royal, M.D., Second Medical District, Box 628, Morehead City
 Graham B. Barefoot, M.D., Third Medical District, 10th and Rankin Street, Wilmington
 B. E. Stephenson, M.D., Fourth Medical District, P.O. Box 206, Rich Square
 Robert M. McMillan, M.D., Fifth Medical District, 140 S.W. Broad Street, Southern Pines
 Willard C. Goley, M.D., Chairman, Sixth Medical District, 214 N. Marshall Street, Graham
 Millard B. Bethel, M.D., Seventh Medical District, 615 E. 4th Street, Charlotte
 Walter T. Rice, M.D., Eighth Medical District, 624 Quaker Lane, High Point
 Wm. M. Long, M.D., Ninth Medical District, S. Main Street, Mocksville
 John B. Anderson, M.D., Tenth Medical District, 215 Doctors Bldg., Asheville
34. **Committee on Physical Rehabilitation (6)**
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 George W. Holmes, M.D., 2240 Cloverdale Avenue, Winston-Salem
 J. Leonard Goldner, M.D., Duke Hospital, Durham
 Charles H. Ashford, M.D., 603 Pollock Street, New Bern
 L. B. Mason, M.D., 1006 Murchison Bldg., Wilmington
 Harry D. Riddle, M.D., 166 W. Franklin Street, Gastonia
35. **Committee Advisory to the North Carolina State Board of Public Welfare (5)**
 Logan T. Robertson, M.D., Chairman, 17 Charlotte Street, Asheville
 Wm. W. Noel, M.D., 309 Wyche Street, Henderson
 Avon H. Elliot, M.D., State Board of Health, Raleigh
 Frank P. Ward, M.D., 501 W. 27th Street, Lumberton
 Paul F. Whitaker, M.D., 1205 N. Queen Street, Kinston
36. **Committee on School Health and State Coordinating Service (8)**
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 Charles H. Gay, M.D., 1012 Kings Drive, Charlotte
 Wm. G. Spencer, Jr., M.D., 301 West End Avenue, Wilson
 H. G. Moore, Jr., M.D., 1010 Grace Street, Wilmington
 Clarence Lee Corbett, M.D., Broad Street, Dunn
 Harry W. Winkler, M.D., 1500 Elizabeth Avenue, Charlotte
 Irma C. Henderson Smathers, M.D., P.O. Box 7325, Asheville
 Floyd L. Knight, M.D., Box 891, Sanford
37. **Committee on Anesthesia Study Commission (10)**
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 D. LeRoy Crandell, M.D., Bowman Gray School of Medicine, Winston-Salem
 John C. Reece, M.D., Grace Hospital, Morganton
 Joseph S. Hiatt, Jr., M.D., 208 S.W. Broad Street, Southern Pines

- Frank S. Parrott, M.D., 126 W. Innes Street, Salisbury
- Williamson Z. Bradford, M.D., 1509 Elizabeth Avenue, Charlotte
- Will Camp Sealy, M.D., Duke Hospital, Durham
- Duncan G. Calder, Jr., M.D., Ardsley Road, Concord
- Horace M. Baker, Jr., M.D., Medical Arts Bldg., Lumberton
38. **Committee on Scientific Audio-Visual Postgraduate Instruction (8)**
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 Lenox D. Baker, M.D., Duke Hospital, Durham
 J. O. Williams, M.D., Cabarrus County Hospital, Concord
 Ernest H. Wood, M.D., N. C. Memorial Hospital, Chapel Hill
 W. Walton Kitchin, M.D., Sampson County Hospital, Clinton
 Charles H. Manzy, Jr., M.D., Bowman Gray School of Medicine, Winston-Salem
 Robert W. Williams, M.D., 1007 Murchison Bldg., Wilmington
 Joseph F. McGowan, M.D., 29 Market Street, Asheville
39. **Committee Advisory to Student AMA Chapters in North Carolina (3)**
 Charles E. Flowers, M.D., Chairman, N. C. Memorial Hospital, Chapel Hill
 Richard T. Myers, M.D., 300 S. Hawthorne Road, Winston-Salem
 James P. Hendrix, M.D., Box 3408, Duke Hospital, Durham
40. **Committee on Medical Golf Tournament (3)**
 Seba L. Whitehead, M.D., Chairman, 508 Public Service Bldg., Asheville
 Wm. A. Brewton, M.D., 5 Lake Drive, Enka
 W. Boyd Owens, M.D., 1426 N. Main Street, Waynesville
41. **Committee To Study Medical Credit Bureaus (5)**
 W. Howard Wilson, M.D., Chairman, 403 Professional Bldg., Raleigh
 Fred K. Garvey, M.D., Co-Chairman, Bowman Gray School of Medicine, Winston-Salem
 Moir S. Martin, M.D., 314 Cherry Street, Mt. Airy
 Roy B. McKnight, M.D., Hawthorne Medical Center, Charlotte
 Ralph J. Sykes, M.D., 205 Rawley Avenue, Mt. Airy
42. **Medical-Legal Committee (6)**
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 Addison G. Brenizer, Jr., M.D., 1012 Kings Drive, Charlotte
 Wiley D. Forbus, M.D., Box 3712, Duke Hospital, Durham
 Bennette B. Pool, M.D., 414 Nissen Bldg., Winston-Salem
 James Tidler, M.D., 306 N. 11th Street, Wilmington
 Daniel S. Currie, Jr., M.D., 111 Bradford Avenue, Fayetteville
 Connell G. Garrenton, M.D., Bethel Clinic, Bethel
43. **Committee on Medical Care Armed Forces Dependents ("MEDICARE") (9) plus Subcommittee consultants**
 David M. Cogdell, M.D., Chairman, 911 Hay Street, Fayetteville
 Daniel S. Currie, Jr., M.D., 111 Bradford Avenue, Fayetteville
 Graham A. Barden, Jr., M.D., 414 Johnson Street, New Bern
- Everett I. Bugg, Jr., M.D., Broad & Englewood, Durham
- Powell G. Fox, M.D., 302 Lands Bldg., Raleigh
- William E. Keiter, M.D., 400 Glenwood Avenue, Kinston
- John P. Henderson, Jr., M.D., Sneads Ferry
- William A. Peters, Jr., M.D., 206 S. Road Street, Elizabeth City
- Donald H. Vollmer, M.D., 403 Doctors Bldg., Asheville
- Donald B. Koonce, M.D., 408 N. 11th St., Wilmington
- Consultants—Subcommittee on Medicare:
 A—General Medicine
 Ralph G. Fleming, M.D., Chairman, 1200 Broad Street, Durham
 John M. Mewborn, M.D., 114 W. Church Street, Farmville
 J. M. Hitch, M.D., 415 Professional Bldg., Raleigh
 John C. Reece, M.D., Grace Hospital, Morganton
- B—Radiology (Diagnostic & Therapeutic)
 Thomas G. Thurston, M.D., Chairman, 512 Mocksville Avenue, Salisbury
 Ivan E. Brouse, M.D., James Walker Memorial Hospital, Wilmington
- C—Surgery
 W. W. Kitchin, M.D., Chairman, Sampson County Hospital, Clinton
 Wm. F. Hollister, M.D., Moore County Hospital, Pinehurst
 Guy L. Odom, M.D., Duke Hospital, Durham
 W. M. Roberts, M.D., Realty Bldg., Gastonia
- C. F. Siewers, M.D., 201 Churchill Drive, Fayetteville
- Larry Turner, M.D., 1110 W. Main Street, Durham
- Fred K. Garvey, M.D., Bowman Gray School of Medicine, Winston-Salem
- John C. Montgomery, M.D., 1400 Scott Avenue, Charlotte
- D—OB-Gyn
 A. Ledyard Decamp, M.D., Chairman, 1505 Elizabeth Avenue, Charlotte
 R. Vernon Jeter, M.D., Plymouth Clinic, Plymouth
 John C. Burwell, Jr., M.D., 101 N. Elm Street, Greensboro
- E—Pediatrics
 Charles R. Bugg, M.D., Chairman, 627 W. Jones Street, Raleigh
 George A. Watson, M.D., 306 S. Gregson Street, Durham
 W. P. Jordan, M.D., Windsor
44. **Committee on Scientific Exhibits (4)**
 Everett I. Bugg, Jr., M.D., Chairman, Broad & Englewood, Durham
 R. B. Raney, M.D., N. C. Memorial Hospital, Chapel Hill
 Lenox D. Baker, M.D., Duke Hospital, Durham
 Harold D. Green, M.D., Bowman Gray School of Medicine, Winston-Salem
45. **Committee on Poliomyelitis (7)**
 Samuel F. Ravenel, M.D., Chairman, 104 E. Northwood Street, Greensboro
 Millard B. Bethel, M.D., 615 E. 4th Street, Charlotte
 Robert F. Young, M.D., Halifax
 Ralph B. Garrison, M.D., 222 W. Main Street, Hamlet
 Wm. G. Spencer, Jr., M.D., 301 W. End Avenue, Wilson
 Frank H. Richardson, M.D., Black Mountain
 Frank R. Reynolds, M.D., 1613 Dock Street, Wilmington

- Wm. F. Harrell, Jr., M.D., P.O. Box 286, Elizabeth City
46. **Committee on American Medical Education Foundation (3)**
 Harry L. Johnson, M.D., Chairman, P.O. Box 530, Elkin
 Kenneth C. Carpenter, M.D., P.O. Box 635, Lenoir
 Frederick H. Taylor, M.D., 1012 Kings Drive, Charlotte
47. **Committee on Diet Nutrition (3)**
 Isaac H. Manning, Jr., M.D., Chairman, 417 Trust Bldg., Durham
- John T. Sessions, Jr., M.D., N. C. Memorial Hospital, Chapel Hill
 Ernest H. Yount, Jr., M.D., Bowman Gray School of Medicine, Winston-Salem
48. **Committee to Implement Survey on Committee Structure (3)**
 Donald B. Koonce, M.D., Chairman, 408 N. 11th Street, Wilmington
 John S. Rhodes, M.D., 700 W. Morgan Street, Raleigh
 John C. Reece, M.D., Grace Hospital, Morganton

BULLETIN BOARD

COMING MEETINGS

North Carolina Heart Association, Annual Meeting—Barringer Hotel, Charlotte, September 14-15.

University of North Carolina Postgraduate Medical Courses; Morganton series — Nurses Home, Grace Hospital, Wednesday afternoons; Mimosa Golf Club, Wednesday evenings, September 18—November 6; Asheville series—Buncombe County Medical Society Library, Thursday afternoons and evenings, Memorial Mission Hospital, September 19—November 7.

University of North Carolina Postgraduate Medical Symposium—Chapel Hill, November 21-22.

International College of Surgeons, Twenty-second Annual Congress of the United States and Canadian Sections—Palmer House, Chicago, September 8-12.

Mississippi Valley Medical Society, Twenty-second Annual Meeting—St. Louis, Missouri, September 25-27.

American Medical Writers' Association, Fourteenth Annual Meeting—St. Louis, Missouri, September 27-28.

World Medical Association, Eleventh General Assembly—Istanbul, Turkey, September 29-October 5.

A.M.A. Study Conference on Rural Health—Purdue University, Lafayette, Indiana, October 4-5.

A.M.A. Council on Foods and Nutrition, Symposium on "Nutrition in Pregnancy"—University of Missouri Medical Center, Columbia, Missouri, October 11.

American College of Surgeons, Forty-third Annual Clinical Congress—Atlantic City, New Jersey, October 14-18.

Medico-Dental Symposium for Combined Forces Medical Department Reserve Officers—U. S. Naval Hospital, Portsmouth, Virginia, October 16-18.

Academy of Psychosomatic Medicine, Fourth Annual Meeting—Morrison Hotel, Chicago, October 17-19.

Association of Military Surgeons, Sixty-fourth Annual Meeting—Washington, D. C., October 28-30.

A.M.A. School Health Conference (Sixth National Conference on Physicians and Schools)—Highland Park, Illinois, October 30—November 2.

Southeastern Allergy Association, Annual Meeting—Fort Sumter, Charleston, South Carolina, November 1-2.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

David H. Prince has been named administrative assistant for continuation education at the University of North Carolina School of Medicine.

Mr. Prince will assist in planning and carrying out postgraduate medical programs which the School of Medicine has been conducting for physicians since 1916. These programs are staged with the cooperation of local medical societies.

* * *

Dr. Nelson K. Ordway, professor of pediatrics of the University of North Carolina School of Medicine, took part in two professional meetings outside of the United States recently.

The first meeting, staged by the Pan-American Sanitary Bureau, which is the Western Hemisphere branch of the World Health Organization, was held July 29 to August 2 in Tehuacan, Mexico. At this meeting, Dr. Ordway took part in a seminar on diarrheal diseases.

The following week he attended the Pan-American Pediatric Congress in Lima, Peru, where he conducted a seminar on fluids and electrolytes.

* * *

Work is nearing completion on a \$300,000 building program at the Psychiatric Center of the North Carolina Memorial Hospital of the University of North Carolina in Chapel Hill.

The project got underway last December and is expected to be completed this fall.

According to Dr. Robert R. Cadmus, director of Memorial Hospital, 50 per cent of the funds required for the project are being supplied by the federal government through the North Carolina Medical Care Commission. The remainder comes from the state.

The Psychiatric Center is located in the hospital's South Wing. This was completed in January, 1955, with the exception of the major part of the ground floor.

Dr. Charles D. Van Cleave, associate professor of anatomy at the University of North Carolina School of Medicine, has been given a two-year leave of absence to work with the United States Atomic Energy Commission, beginning in September.

Dr. Van Cleave will work with the government agency in the study of bone metabolism and bone marrow replacement therapy in relation to the fallout from the atmosphere following the test of nuclear weapons. In his new position, he will be in contact with research developments in this field all over the world. He will also assist in coordinating the activities of the various groups working on the project within the United States. A third phase of the work will deal with the organization, development, and guidance of research contracts by means of which studies on the biomedical aspects of radiation effects are supported. His headquarters will be in Washington, D. C.

* * *

Dr. Lloyd Yonce has been appointed assistant professor in the Department of Physiology of the University of North Carolina School of Medicine.

The announcement of his appointment was made by Chancellor William B. Aycock following the approval of President William Friday and the UNC Board of Trustees.

Dr. Yonce received his B.S. degree in 1949 from Montana State College, his M.S. degree from Oregon State College in 1952, and his Ph.D. degree from the University of Michigan Medical School in 1955.

Prior to his present appointment, he had taught at Oregon State College, University of Michigan Medical School, and the University Hospital of Augusta, Georgia.

* * *

Dr. B. A. Schottelius an instructor in physiology at the University of North Carolina School of Medicine, has accepted a position with the University of Iowa at Iowa City, Iowa.

Dr. Schottelius joined the faculty of the School of Medicine here in 1954. His resignation is effective at the end of this month.

* * *

Dr. William P. Richardson, assistant dean for continuation education, has announced a series of postgraduate medical courses to be held in Morganton and Asheville this fall.

The Morganton programs will be presented at the Nurses' Home, Grace Hospital, on Wednesday afternoons, and at the Mimosa Golf Club on Wednesday evenings, beginning on September 18 and running through November 6. Dr. W. H. Kibler is chairman of the local arrangements committee.

The Asheville series will be held on Thursday afternoons and evenings at the Buncombe County Medical Society Library at the Memorial Mission Hospital, beginning on September 19 and running

through November 7. Dr. Leon Feldman is chairman of the local committee for the Asheville course.

Both programs will omit September 25 and 26 and October 16 and 17, because of District Medical Society meetings.

The programs are as follows:

September 18 and 19

Dr. Leonard Palumbo, Associate Professor of Obstetrics and Gynecology, UNC School of Medicine—"The Management of Prolonged Labor" and "The Diagnosis and Management of Gynecologic Malignancy"

October 2 and 3

Dr. Milton S. Sacks, Professor of Clinical Medicine, University of Maryland School of Medicine—subjects in the field of hematology

October 9 and 10

Dr. W. A. Sodeman, Magee Professor and Chairman of the Department of Medicine, Jefferson Medical College—"The Use and Abuse of Steroids in Therapy" and "Fluid and Electrolyte Problems with Special Reference to the Cardiac Patient"

October 23 (Morganton)

Dr. William W. Forrest, Assistant Professor of Pathology, UNC School of Medicine, and a representative of the UNC Institute of Government—"The North Carolina Medical Examiner Law" and "Medico-Legal Problems"

October 24 (Asheville)

Dr. Erle E. Peacock, Instructor in Surgery, UNC School of Medicine—"Some Problems in Wound Care"; and "Restorative Hand Surgery"

October 30 and 31

Dr. W. M. Kelsey, Professor and Director of the Department of Pediatrics, Bowman Gray School of Medicine—"Medical Emergencies in Children" and "Feeding Problems in Children"

November 6 and 7

Dr. Benjamin Manchester, Assistant Clinical Professor of Medicine, The George Washington School of Medicine—two subjects in the cardiovascular field

These courses are approved by the American Academy of General Practice for Category I credit.

* * *

The University of North Carolina School of Medicine is planning a postgraduate medical symposium at Chapel Hill on November 21 and 22. There will be a one-day program on cardiology with the second day being devoted to several different subjects of interest to all physicians. The faculty will consist of visiting professors and members of the School of Medicine faculty. A complete program will be mailed to physicians at a later date.

* * *

Dr. Edwin P. Hiatt of the University of North Carolina School of Medicine, has accepted a research position as a civilian with the United States Air Force.

Dr. Hiatt, an associate professor of physiology here, will be chief of the Acceleration Section and consultant to the Biophysics Branch of the Aero-Medical Laboratory at Wright-Patterson Air Force Base near Dayton, Ohio. His resignation here is effective August 31.

He joined the faculty of the UNC School of Medicine in 1944.

* * *

New appointments and promotions at the University of North Carolina School of Medicine were announced recently.

Promotions

To the rank of professor: Joseph Logan Irvin, Department of Biochemistry and Nutrition.

To the rank of associate professor: Eugene A. Hargrove, David R. Hawkins, John T. Sessions, Margaret C. Swanton, Kerr L. White.

To the rank of assistant professor: Eugene B. Crawford, Jr., Thomas Edwin Curtis, Walter Hollander, Jr., Daniel L. Donovan, William E. Dossel, Philip M. Johnson, Thomas F. Williams, and Daniel T. Young.

Appointments

In the School of Medicine Eugene B. Crawford, Jr. was appointed associate director of North Carolina Memorial Hospital, and Joseph Logan Irvin was appointed chairman of the Biochemistry and Nutrition Department.

* * *

L. Deno Reed, instructor in surgery at the University of North Carolina School of Medicine, has resigned to do graduate work at the Johns Hopkins School of Hygiene.

Reed came here in 1954 as audiologist and speech pathologist at the Hearing and Speech Center of North Carolina Memorial Hospital, the teaching hospital of the School of Medicine. He also has been a lecturer in the UNC School of Nursing.

Margaret Moore, head of the Department of Physical Therapy of the North Carolina Memorial Hospital, attended a meeting of the International Society for the Welfare of Cripples in London, England, July 22-27. While abroad she toured rehabilitation centers in England, Norway, Sweden, Denmark, and France.

At the London meeting she represented the North Carolina Society of Crippled Children and Adults. She will resume her regular hospital duties in August.

* * *

Dr. Hugh C. Hemmings, who recently completed his resident training at Memorial Hospital of the University of North Carolina, has associated with Dr. W. H. Patton, Jr. of Morganton in the practice of pediatrics.

For the past three years, Dr. Hemmings has been a resident physician at Memorial Hospital undergoing graduate training in pediatrics.

Memorial Hospital at the University of North Carolina has become the recipient of a grant of \$22,000 from the Tri-Sigma national social sorority for expansion of the space and facilities for crippled and sick children in the Pediatrics Ward. The expanded area will be named for the Robbie Page Memorial and will make possible an advanced therapy program.

The grant will be met by matching funds from the North Carolina Medical Care Commission.

This project is the second in a series of grants to the hospital through the Robbie Page Memorial Fund. The first step was taken last winter with the donation of \$1,700 for the intercommunication system and records which enabled therapists to reach the children in every room through music or stories.

The Memorial Fund was established in honor of Robbie Page who died of polio in 1951. Robbie was the son of Mr. and Mrs. Robertson Page of Douglaston, New York. Mrs. Page was national sorority president at the time.

* * *

The King's Daughters of Chapel Hill have created an endowment in excess of \$1,000 at the North Carolina Memorial Hospital of the University of North Carolina, according to an announcement by Chancellor William B. Aycock.

The fund to be known as the Estelle Ward Lawson Memorial Fund—is named in honor of the late Mrs. Lawson, who was for years a leader of The King's Daughters and devoted much of her time to the assistance of needy persons of Orange County.

Mrs. Lawson, who died in 1949, was the wife of the late Dr. Robert B. Lawson of the UNC School of Medicine. Dr. Lawson died in 1952.

The income from the fund will be used at the discretion of the director of Memorial Hospital for the aid in the care of indigent patients from Orange County. It is anticipated that the money will be used to purchase crutches, braces and medicine, and also to pay bus fare for patients and hire ambulances where needed.

Members of The King's Daughters said contributions to the fund will be welcomed. They have suggested that many persons may wish to contribute to the fund as a memorial for members of their families.

* * *

A grant of \$31,050 from the U. S. Public Health Service has been made to Dr. Gordon Dugger, assistant professor of surgery, of the University of North Carolina School of Medicine.

The three-year grant of \$10,350 a year will be used for the study of the effects of pituitary gland operations on patients with cancer. Associated with Dr. Dugger in the research are Drs. James Newsome and Judson Van Wyk, both of the UNC School of Medicine.

Dr. Michael K. Berkut, assistant professor of biochemistry and nutrition of the University of North Carolina School of Medicine, is spending the summer at Oak Ridge, Tennessee, as an Oak Ridge research participant.

He is one of 54 scientists from colleges and universities in 22 states who are taking part in the summer program. Of the 54 visiting scientists 51 will conduct research at the Oak Ridge National Laboratory.

Dr. Berkut has been assigned to the Medical Division of the Oak Ridge Institute of Nuclear Studies.

* * *

The first and only course in the state leading to an academic degree in physical therapy will begin at the University of North Carolina in September.

Upon successful completion of the course, which includes four years of academic work and one summer of clinical work, the student will be awarded a degree of bachelor of science in physical therapy.

At the present time there are only three schools in the South offering work in physical therapy.

The aim of the new program at the University of North Carolina is to train and place more physical therapists in North Carolina communities and institutions.

It has been endorsed by the North Carolina Chapter of the American Physical Therapy Association. Funds for the Program were made available by the General Assembly of North Carolina this year.

The new UNC program will be under the direction of Miss Margaret Moore of Memorial Hospital at the University, who also is head of the hospital's Department of Physical Therapy, and Dr. William P. Richardson, assistant dean of the School of Medicine. Miss Moore will be director of the curriculum and Dr. Richardson will be medical director of the program.

The physical therapy curriculum will be offered by the School of Medicine in conjunction with the General College of the University. The curriculum is designed to conform to the requirements in physical therapy as established by the Council on Medical Education and Hospitals of the American Medical Association.

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Dr. James A. Green, an assistant professor of anatomy at the University of North Carolina School of Medicine, has accepted a position with the Indiana University as an associate professor of anatomy.

He joined the faculty of the UNC School of Medicine in 1950 as an instructor.

* * *

Dr. John H. Ferguson, head of the Physiology Department of the University of North Carolina School of Medicine, has been awarded the Doctor

of Science degree by his alma mater, the University of Cape Town.

It was awarded to Dr. Ferguson for his research in the field of blood coagulation and the hemorrhagic diseases, in which he has published over 100 scientific papers.

* * *

What is believed to be a new type of bleeding disease in human beings has been discovered by two staff members of the University of North Carolina School of Medicine.

Dr. John H. Ferguson, head of the Physiology Department, and his research associate, Dr. C. L. Johnston, Jr., are working on problems of blood coagulation and hemorrhagic diseases, with the aid of \$52,000 three-year research grant from the National Institutes of Health, U.S. Public Health Service.

The new disease is due to the presence in the blood of a specific inhibitor of AcG. AcG is one of the numerous chemicals (proteins) in the body which help the blood to clot. Without a full quota of clotting factors, uncontrolled bleeding is likely to occur.

Only a few cases are known to be due to some inhibitor which deprives the blood of a factor necessary for clotting.

The reported case involved an elderly North Carolina white farmer who was operated upon for a gallbladder condition. Following the operation, the patient began to bleed from the kidney. Transfusions seemed to make the condition worse.

Numerous tests disclosed that the patient had "a circulating inhibitor specific for AcG." Adding AcG in the test tube experiments improved the clotting, but the inhibitor was so powerful that giving AcG in the form of the usual blood or plasma transfusions would be wholly inadequate. No other clotting factor was lacking, according to the tests, but the AcG lack explained all abnormal test results and could account for the bleeding in this patient.

The patient's condition was discovered this spring. At the present time he is well and his tests are nearly normal, perhaps because of treatment with ACTH and cortisone. Drs. Ferguson and Johnston explain, however, that it is possible for the patient to regain the inhibitor that brought about the original deficiency of AcG. He will be carefully watched, therefore, lest the bleeding returns.

This case is believed to be the first of its kind to be fully substantiated.

* * *

Six faculty members of the University of North Carolina School of Medicine took part in the thirty-seventh annual session of the Southern Pediatric Seminar at Saluda.

The annual event got under way July 8 and continued through July 27. The section of the meeting on pediatrics and internal medicine was

held July 15-20. Taking part in this section of the meeting was Dr. Samuel F. Ravenel of Greensboro, clinical professor of pediatrics.

Five faculty members, both regular and clinical, took part in the obstetrics and gynecology section of the meeting which was held July 22-27.

These were Dr. James F. Donnelly, Raleigh, Clinical Assistant Professor of Obstetrics and Gynecology; Dr. Charles E. Flowers, Jr., Chapel Hill, Associate Professor; Dr. Henry F. Fuller, Kinston, Clinical Associate Professor; Dr. Hugh A. McAllister, Lumberton, Clinical Assistant Professor and Dr. Robert A. Ross, Chapel Hill, Professor and Head of the UNC Department of Obstetrics and Gynecology.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST COLLEGE

Dr. Martin G. Netsky, professor of neuropathology and associate professor of neurology, has returned from the meeting of the First International Congress of Neurological Sciences, held in Brussels, Belgium. He presented a paper, "The Effects of Roentgen Rays on Experimentally-Induced Gliomas: Studies Using the Ultraviolet Microscope."

* * *

Dr. Robert L. Tuttle, associate professor of microbiology and immunology, has completed a course in methods and principles of tissue culture sponsored by the Tissue Culture Association. The course was offered at the University of Colorado Medical Center from July 1 through 26. The National Foundation for Infantile Paralysis provided financial assistance.

* * *

Plans are being completed for the annual alumni meeting to be held in Winston-Salem on October 25 and 26, 1957. Members of the faculty will present a symposium during the afternoon session of October 25, followed by a banquet and business session in the evening. Tours of the hospital and medical school will be conducted during the morning of October 26, and special reserved section is being made for the medical alumni at the football game between Wake Forest College and the University of North Carolina.

* * *

Recent additions to the faculty include Dr. James B. Nichols, Jr., instructor in clinical neurosurgery; Dr. Charles C. Stamey, assistant in clinical pediatrics; Dr. Thomas E. Fitz, assistant in clinical internal medicine; Dr. Robert E. Cordell, instructor in surgery; Dr. Carolyn C. Huntley, instructor in pediatrics; Dr. Benjamin F. Huntley, assistant in clinical internal medicine; Dr. Delmar E. Bland, assistant in clinical internal medicine; Dr. Sara Courts McClure, instructor in pathology; Dr. June Foley, assistant in preventive

medicine; Dr. John Nicholson, assistant in clinical internal medicine; Dr. William Cunningham Sugg, assistant in clinical internal medicine; and Dr. W. Joseph May, assistant in clinical obstetrics and gynecology.

NEWS NOTES FROM THE DUKE UNIVERSITY SCHOOL OF MEDICINE

Plans for a major scientific attack on the problems of aging were revealed at Duke University recently with the announcement that a pioneer Regional Center for Research on Aging will be established on the University campus. First of its kind in the nation, the center will be supported in part by a U. S. Public Health Service grant expected to total more than \$1,500,000 over a five-year period.

The center will serve as a pilot project in the Southeast and its success may determine whether or not similar undertakings will be launched in other regions with support from the National Institutes of Health.

Surgeon General Leroy E. Burney of the U. S. Public Health Service, honored guest at a special dinner meeting held at Duke in connection with announcement of the center, said that this marks "the first time that funds appropriated by Congress to the Public Health Service for aid to research have been awarded to help in the establishment of a large-scale research center."

Dr. Ewald W. Busse, chairman of the Duke Medical School's Department of Psychiatry and of the Duke University Council on Gerontology, will be principal investigator for the center's research program. Over-all work of the center will be directed toward the ultimate goals of slowing the aging process, promoting the health of elderly persons, and preventing or delaying the institutionalization of the aged.

Dr. Busse, who outlined plans for the center, explained that a Panel on Interdisciplinary Research will determine the research policies of the center.

Duke personnel serving with Dr. Busse on this steering panel will be Dr. Eugene A. Stead, Jr., chairman of the Department of Medicine; Dr. Philip Handler, chairman of the Department of Biochemistry; Dr. Barnes Woodhall, professor of neurosurgery, and Dr. Eliot H. Rodnick, chairman of the Psychology Department. Ex-officio members will be Dr. Paul M. Gross, vice president and dean of the University, and Dean W. C. Davison of the Duke School of Medicine.

* * *

Duke University's combined facilities for medical and nursing teaching treatment and research have received a new name. Dr. W. C. Davison, dean of the Medical School announced recently that henceforth these facilities will be known as the Duke University Medical Center.

The new name has been selected to provide one

over-all designation for the many units that make up the medical portion of the Duke campus, he explained. These units include the School of Medicine, School of Nursing, Duke Hospital with its Out-Patient Department and Private Diagnostic Clinics, and buildings such as the Elizabeth P. Hanes Nurses' Residence and the William Brown Bell Medical Research Building.

Each unit will retain its present name, but will be considered part of the Medical Center in designation as well as fact. The hospital mailing address, for example, will be: Duke Hospital, Duke University Medical Center, Durham, North Carolina.

* * *

A Duke University physician just back from tour of U. S. Air Force installations in the Far East reports that American servicemen have been "virtually unaffected" by the current epidemic of Oriental influenza.

Dr. J. Lamar Callaway, professor of dermatology in the Duke Medical School, said in an interview recently that the new type of influenza "is not the problem to Americans that it is to native populations in the Far East."

Dr. Callaway had high praise for U. S. Air Force medical facilities in the Far East. "The physical equipment is excellent, medical staffs are extremely capable, and hospital libraries are stocked with up-to-date books," he said. "In addition to treating American servicemen, most of the station hospitals are engaged in research on medical problems native to their areas."

* * *

Ultrasonic sound waves that turn a tank of water into millions of tiny "vacuum cleaners" are now being used to clean surgical instruments here at Duke Hospital.

This marks only the second installation of hospital ultrasonic cleaning apparatus in the South.

Explaining the significance of this innovation, Dr. Deryl Hart, chairman of the Duke Medical School's Department of Surgery, explained that about 30 seconds are required to clean each surgical instrument prior to sterilization when done by hand. The new ultrasonic device, however, can clean as many as 120 instruments in two minutes, thus greatly lessening the time and labor cost.

Also, he noted, when the same set of surgical instruments is needed for two consecutive operations, the stepped-up cleaning process reduces the time lapse between operations. This makes possible more efficient use of operating room facilities.

* * *

A \$27,275 March of Dimes grant has been made to Duke University to continue its production of motion pictures for teaching anatomy.

The grant was announced jointly by Duke President Hollis Edens and Basil O'Connor, president of the National Foundation for Infantile Paralysis. Under way in the Duke Medical School since 1951, the project has been supported by a series of March of Dimes grants now totaling \$210,392.

CHARLOTTE GYNECOLOGICAL AND OBSTETRICAL SOCIETY

Announcement has been made of the organization of the Charlotte Gynecological and Obstetrical Society at a meeting held in Charlotte on April 4, 1957. At the first regular meeting, held on April 30, the following officers were elected: Dr. W. Z. Bradford, president; Dr. James A. Crowell, vice president; Dr. Edward F. Hardman, secretary-treasurer; and Dr. Bradford and Dr. O. Hunter Jones, members of the executive committee.

The society held its second meeting on June 6, at which time Dr. James Donnelly of the North Carolina State Department of Public Health was guest speaker.

The purpose of the society, as stated in the Constitution, "shall be to promote friendship and social congress between physicians of the city of Charlotte and surrounding areas, whose medical interest is in the field of gynecology and obstetrics. The Society is also constituted for the purposes of promoting the art and science of gynecology and obstetrics among its members and other physicians, and of improving the opportunities in the community for service to the public welfare which may be applicable in the specialty of gynecology or obstetrics."

Meetings will be held on the first Thursday of each month. The membership shall be of two classes, active and honorary. All members shall be practitioners of medicine of good character and standing and members of their respective county medical society, and must limit their practice to the specialty of obstetrics and gynecology.

NORTH CAROLINA HEART ASSOCIATION

W. James Logan, former Western District field director of the North Carolina Heart Association, has been chosen to be the new executive director of the state Heart group, according to its president, Dr. Edward P. Benbow of Greensboro. The former executive director, William W. Wood, has accepted the post of assistant medical director in administration with the American Heart Association in New York.

* * *

Two women and 17 men will spend over \$96,000 in North Carolina's three medical centers between now and next summer searching for answers to some of the many questions concerning heart and blood vessel diseases.

They are part of a scientific task force in all parts of the nation which is pushing back the frontiers of knowledge about these diseases, including better methods of diagnosis, treatment, rehabilitation and prevention. Examples: Dr. James V. Warren at Duke is working on the diagnostic significance of "gallop rhythm" of the heart; Dr. Robert Vann at Bowman Gray is studying the treatment of rheumatic fever patients with peni-

cillin to strengthen their resistance to "strep" infections; Dr. Dan A. Martin at UNC is evaluating the role of emotions on the course of heart disease; and Dr. William S. Lynn at Duke is studying ways to lower the blood fat content, with the hope that this may lessen susceptibility to arteriosclerosis.

In addition, large sums of money are being spent to support basic research. Dr. Merrill Spencer, at Bowman Gray, for instance, is embarked on a long-term project to determine how the blood supplies of brain and heart are maintained in disease conditions, while Dr. Bodil Schmidt-Nielsen at Duke and Dr. Carl Gottschalk at UNC are concerned with different areas of the important relationship of the kidneys to the heart and circulatory system. These three scientists are Established Investigators of the American Heart Association, as is Dr. McChesney Goodall at Duke, who is studying the production and role of certain hormones that help raise blood pressure.

NEWS NOTES

Dr. James B. Nichols, Jr., has opened offices for the practice of neurological surgery at 501 Nissen Building, Winston-Salem.

* * *

Dr. W. Joseph May has announced the opening of his office at Winston-Salem Professional Building, 2240 Cloverdale Avenue, Winston-Salem, in association with Dr. Roscoe L. Wall, Jr. His practice will be limited to obstetrics and gynecology.

* * *

Dr. William C. Sugg has announced the opening of his office at 625 Reynolds Building, Winston-Salem, for the practice of internal medicine and gastroenterology.

MILITARY MEDICO-DENTAL SYMPOSIUM

The First Annual Medical Department Symposium for Combined Armed Forces Medical Department Reserve Officers under the auspices of the Commandant, Fifth Naval District, will be held at the U. S. Naval Hospital, Portsmouth, Virginia, October 16-18. The three-day program will have as its theme "Advances in Operational Military Medicine".

The symposium has been approved for retirement point credit for those in attendance who are on the Active Status List in the Armed Services Reserve Program, provided they register with the authorized military representative assigned the duties of recording daily attendance. Programs and additional information may be obtained by addressing the District Medical Officer, Fifth Naval District, Naval Station, Norfolk, Virginia.

SOUTHERN REGIONAL EDUCATION BOARD

Mr. Paul Harkey, Oklahoma attorney, has been elected chairman of the Southern Regional Council on Mental Health Training and Research.

Elected vice chairman by the Council was Dr.

M. A. Tarumianz, state psychiatrist for Delaware. Three other Council members were elected to serve on the Executive Committee: Dr. Mary Carl of the University of Maryland School of Nursing, Dr. Nicholas Hobbs, psychologist from George Peabody College for Teachers in Nashville, Tennessee, and Dr. Cyril J. Ruilmann, Tennessee Commissioner of Mental Health.

The Council was established in 1954 as part of the program of the Southern Regional Education Board. Its purpose is to aid states in training more personnel for mental health programs and increasing research in mental health and illness.

MISSISSIPPI VALLEY MEDICAL SOCIETY

Mississippi Valley Medical Society Meeting
St. Louis, Sept. 25-27

The twenty-second annual meeting of the Mississippi Valley Medical Society will be held at the Sheraton-Jefferson Hotel, St. Louis, September 25, 26, 27. More than 40 clinical teachers from leading medical schools will conduct the assembly. The program will include six panel discussions: September 25, Obstetrics; Burns: September 26, the Acute Surgical Abdomen; Peptic Ulcer: September 27, Chronic Diseases in Infancy and Childhood; Headache.

All members of the A.M.A. are cordially invited and urged to attend. There will be a large technical and scientific exhibit hall. Further details may be obtained from Harold Swanberg, M.D., Secretary, 209-224 W.C.U. Building, Quincy, Illinois.

Dr. Wilfred Dorman of Brooklyn, New York, winner of the 1957 Mississippi Valley Medical Society Essay Contest, will present his paper, "The Challenge of New Drugs," at the Society banquet on September 26.

AMERICAN MEDICAL WRITERS' ASSOCIATION

The fourteenth annual meeting of the American Medical Writers' Association will be held at the Sheraton-Jefferson Hotel, St. Louis, September 27-28, under the presidency of Dr. Dean F. Smiley, Secretary of the American Association of Medical Colleges. Eighteen medical writers and authors will address the association.

All members of the American Medical Writers' Association and other collegiate graduates are cordially invited and urged to attend this meeting. There is no charge for the meeting September 27, but there is a registration fee of \$5.00 for non-members of the Association who attend the workshop on September 28.

NATIONAL FOUNDATION FOR INFANTILE PARALYSIS

September 1 and December 1 are the current deadlines for applications to the National Foundation for Infantile Paralysis for post-doctoral fellowships in research, academic medicine, or in the

clinical fields of psychiatry, rehabilitation, orthopaedics, the management of poliomyelitis, and preventive medicine. Applications for fellowships in the medical associate fields of social science, health education, physical therapy teaching, and occupational therapy teaching should also be filed by these dates. A spring date of March 1 is also provided.

For further information write to: Division of Professional Education, National Foundation for Infantile Paralysis, 301 East 42nd Street, New York 17, New York.

NEWS NOTES FROM THE AMERICAN MEDICAL ASSOCIATION

A.M.A. Plans School Health Conference This Fall

"A Decade of Progress in Fitness" will be the theme of the sixth National Conference on Physicians and Schools to be held October 30 to November 2 at the Moraine-on-the-Lake Hotel, Highland Park, Illinois. Sponsored by the A.M.A.'s Bureau of Health Education, this year's program will emphasize a continuing interest in the health and all around fitness of children and youth.

More than 60 nationally recognized consultants and resource persons have been selected from medicine, education and public health to lead the discussion groups. Topics to be considered include: the physician's role in youth fitness; community coordination; mental and emotional aspects of fitness; dramatizing basic fitness procedures; medical guidance in girls' recreation programs; special health problems in athletics; fitness of school personnel; optimum fitness for youth with special health problems; home and family relations; food factors in fitness.

As in previous conferences, state medical societies, state health and education departments, and national agencies concerned with school health and health education have been invited to send representatives. State societies should select their delegates and notify the Bureau as soon as possible. In addition, medical associations should encourage state health and education departments to send representatives so that a nucleus of well-informed persons from several professions can lend inter-professional leadership to school health activities within each state.

A.M.A. Jointly Sponsors Meeting On Radio And TV

Representatives of medical societies, radio and television stations, voluntary health organizations, medical schools and allied groups will be invited to attend a national conference on "How to Use Local Television and Radio in the Health Field" November 7-8 at Chicago's Sheraton-Blackstone. The two-day conference is being sponsored jointly by the American Medical Association and the National Association of Radio and Television Broadcasters.

Keynote speakers at the opening session will be

Dr. David B. Allman, A.M.A. president, and Harold E. Fellows, NARTB president, discussing the importance of public interest broadcasting from the point of view of the medical profession and the radio-television industry. Panel discussions will be held on "Mutual Obligations in Public Interest Programming" and "The Matter of Taste"—the need for keeping tab on material presented over radio and television.

In addition, the group will split up into three sections by size of community to consider such things as the importance of good working relationships between health groups and radio and TV stations; financing of public interest presentations; programming of public interest presentations (content, format, live shows, film shows, visual aids); utilization of spot announcements; working with news rooms; evaluation of program impact; promotion; medical ethics involved in public interest programming.

The program committee has announced that only a limited number can be accommodated at the conference, so advance registration is advisable. Register by writing the American Medical Association, 535 North Dearborn, Chicago 10, Illinois. No fee for the conference will be charged, but luncheon tickets will be sold.

A.M.E.F. Spearhead Fall Campaign

The American Medical Education Foundation will launch an intensive fall campaign for contributions to the nation's medical schools. October and November have been selected as the months in which to appeal to physicians for individual donations.

To assist local committees the AMEF has prepared a new pocket portfolio with information cards and pledge envelopes. A new folder entitled "So They May Serve" has also been produced for use in local and state mailings. A new exhibit—first displayed at the A.M.A. convention in New York—is available from the Foundation office for state meetings. Featuring pictures of medical schools and gift checks to AMEF, this exhibit illustrates reasons why medical schools should be privately supported.

In a progress report as of July 1, the AMEF announced that the six million dollar mark of contributions from the medical profession had been passed earlier this year. The report also stated that so far in 1957 the AMEF income is 15 per cent higher than in the same period last year.

Physicians are urged to contribute generously to the Foundation during the remaining months of 1957.

A.M.A. To Publish Medicolegal Material

To guide physicians and hospitals in the selection of appropriate medicolegal forms, the A.M.A.'s Law Department has compiled a series of six brief articles for the *Journal of the AMA*. These articles will appear weekly in the *Journal* beginning about September 1. In addition, the Law Department will

publish a booklet encompassing the material plus case citations and legal analysis for distribution about October 1.

Chief purpose of this material will be to provide up-to-date information and miscellaneous medico-legal forms which physicians and their attorneys may adapt for their own needs. Subjects to be covered: (1) consent to operations and other medical procedures; (2) patient's right to privacy; (3) confidential communications and records; (4) artificial insemination; (5) the physician-patient relationship; (6) autopsy.

In all cases, the Law Department strongly advises doctors to seek competent legal advice locally.

A.M.A. To Stage Fall Rural Health Meeting

How to develop more effective rural health programs will be the chief topic of concern at the American Medical Association's second study conference October 4 and 5 for chairmen and members of state rural health committees. Sponsored by the Council on Rural Health, the conference will again be held at Purdue University.

The opening session will be devoted to a discussion of organizational techniques of statewide rural health committees. Another session will feature representatives of leading farm organizations outlining their health programs. Following this latter presentation will be a discussion of ways that the medical profession and agricultural groups can best work together in developing better health programs. Registrants also will have an opportunity to get together with others from their own regions to discuss mutual problems.

Reservations for this conference should be sent directly to Students Union, Purdue University, Lafayette, Indiana.

Three New A.M.A. Exhibits

Three new exhibits previewed at the American Medical Association's 1957 Public Relations Institute in Chicago August 28-29 will be available for bookings by state and county medical societies in September.

(1) "Digestion"—shows the organs involved in digestion, the passage of food through the body, the mechanics of swallowing, the action of the stomach and intestines, and the body's absorption of food. (2) "Alcoholism Is Your Business"—(for professional audiences) gives the viewer an opportunity to eavesdrop on a conversation between a distraught spouse and the family physician over the treatment of alcoholism. (3) "Organs of the Human Body"—three dimensional models of the torso show location of various organs in the body and their functions.

Further information on these displays may be secured from the AMA Bureau of Exhibits.

A.M.A. Conference On Nutrition In Pregnancy

Because nutrition plays such an important role in all phases of reproduction, the AMA's Council on Foods and Nutrition has selected "Nutrition in

Pregnancy" as the title of its 1957 symposium. The meeting will be held October 11 at the University of Missouri Medical Center, Columbia, Missouri. Joint sponsors with the AMA are the University of Missouri Medical School and Adult Education and Extension Service and the Boone County Medical Society.

The symposium will provide an excellent opportunity for physicians, nutritionists, dietitians, nurses and others to acquaint themselves with current findings in nutrition and the practical application of these findings to the management of obstetrical patients.

Topics to be discussed include: the influence of maternal nutritional level on the fetus and infant; metabolic and biochemical changes in normal pregnancy; importance of nutritional state of mother prior to conception; nutrition experiments as an instrument of teratologic research; the effect of the reproductive cycle on nutritional status and requirements; dietary habits during pregnancy; panel discussion to review epidemiologic studies.

AMERICAN PSYCHIATRIC ASSOCIATION

The American Psychiatric Association has announced the award of 19 Smith, Kline & French Foundation fellowships in psychiatry.

Thirteen of these will enable medical students to participate in psychiatric research or training programs this summer. Two other student programs will start in the fall.

These Fellowships are administered by a committee named by the American Psychiatric Association and consisting of Drs. Kenneth E. Appel, Philadelphia, chairman; Daniel Blain, Washington, D. C.; Henry Brill, Albany, New York; Jacob E. Finesinger, Baltimore; Francis J. Gerty, Chicago; Robert G. Heath, New Orleans; David A. Young, Raleigh, and Seymour Vestermark, Bethesda, Maryland.

Two North Carolina institutions were among those receiving grants. They are:

Duke University School of Medicine—a grant to permit two students to work with members of the medical faculty during the summer on research projects. Mr. Donald J. Meiller will work with Dr. Ewald W. Busse, chairman of the Department of Psychiatry, on "investigation of patterns of hypochondriacal and depressive behavior in elderly subjects." Mr. H. T. Tulley will work with Dr. Sidney Olansky, associate professor of dermatology and a member of the psychiatrically-oriented Interdisciplinary Research Team, on "physiological and psychiatric aspects of pruritus in the elderly."

University of North Carolina School of Medicine—a grant to enable a student to participate in a limited-psychotherapy program at the Adult Psychiatric Outpatient Clinic. The student selected is Mr. Hilliard Foster Seigler.

ACADEMY OF PSYCHOSOMATIC MEDICINE

The program of the fourth annual meeting of the Academy of Psychosomatic Medicine to be held October 17-19, at the Morrison Hotel in Chicago will be devoted to "Psychosomatic Aspects of Obstetrics, Gynecology, Endocrinology, and Diseases of Metabolism." The meeting will be open to all scientific disciplines, as well as psychologists, social workers, and nurses. Information may be obtained from Dr. William S. Kroger, Secretary, 104 South Michigan Avenue, Chicago 3, Illinois.

The purpose of the Academy is to teach psychosomatic medicine in a manner assimilable to the general practitioner and non-psychiatrically oriented physician.

AMERICAN COLLEGE OF SURGEONS

Progress in surgery as it is emerging from research laboratories and operating rooms is the theme of the forty-third annual Clinical Congress of the American College of Surgeons, meeting in Atlantic City, New Jersey, October 14 through 18.

The Congress program will include postgraduate courses, discussions in general surgery and the surgical specialties, motion pictures, cine clinics, color television from Johns Hopkins Hospital in Baltimore, research reports, and scientific and technical exhibits.

Among medical students from 36 medical colleges who will attend the congress as guests of the college are the following from North Carolina: William Riley Bullock—University of North Carolina School of Medicine; Thomas A. Kirkland, Jr.—Duke University School of Medicine; and John William Rogers—Bowman Gray School of Medicine of Wake Forest College.

Headquarters for the Congress will be Convention Hall, with some of the sessions scheduled at nearby hotels.

INTERNATIONAL COLLEGE OF SURGEONS

Problems of plastic surgery will be covered fully during the twenty-second annual Congress of the United States and Canadian Sections, International College of Surgeons, in the Palmer House, Chicago, September 8-12.

The Section on Plastic and Reconstructive Surgery will meet jointly with the General Assembly on the afternoon of September 9, it was announced by Dr. Arthur N. Owens, New Orleans, section chairman. Papers also will be presented before section meetings on the afternoons of September 10 and 11.

The scientific program of the congress will cover all phases of surgery. The speakers will include world-renowned surgeons from four other continents, as well as from the United States, Canada and Mexico.

Additional information may be had by writing Dr. Ross T. McIntire, executive director of the International College of Surgeons, 1516 Lake Shore Drive, Chicago 10, Illinois.

Sustagen Used to Control Hemorrhage From Gastric Ulcers

Immediate buffering of gastric juice to help control hemorrhage in patients hospitalized for treatment of bleeding gastroduodenal ulcers has been recommended by Drs. C. Elmer Wirts and Tibor Bodi of the Jefferson Hospital, Philadelphia.

Their recommendations, based on their experiences as members of an advisory "bleeding team" at the hospital over the last four years, is made in an article in the April 6 issue of the *Journal of the American Medical Association*.

The rising number of older patients who did not respond to medical treatment and who also either refused surgery or were such poor risks surgery could not be attempted, they said, led to a series of experiments on the effect of gastric juice on blood coagulation and blood clots with and without buffering.

These experiments showed conclusively that blood will not coagulate in the presence of gastric juice containing free acid and pepsin unless it is buffered, they wrote.

"Because of these findings we attempted to produce more complete buffering of the patient's gastric juice as soon after his hospital admission as possible," they said.

"After testing a variety of agents, we preferred a milk-protein polysaccharide mixture known as Sustagen, because it could be given in sufficiently large amounts to produce adequate buffering and was well tolerated by the majority of patients."

Sustagen, they continued, "had the advantage of being a nutriment of high caloric value, with vitamin and mineral supplement, and yet it rarely produced abdominal cramps or diarrhea, as some protein hydrolysate products had in our experience." Sustagen is a water-soluble, complete therapeutic food in powder form manufactured by Mead Johnson & Company, Evansville, Indiana.

"The ability (of Sustagen) to maintain buffering throughout the 24 hours appealed to us as an excellent means of combating the deleterious effect of high acid and pepsin on hemostasis," they said.

Veterans administration hospitals are safe places for volunteers to work, so far as danger of getting tuberculosis goes. Although tuberculosis afflicts about one out of every 1,000 persons in the general population, a survey of VA hospitals and other installations showed not one of 11,375 volunteer workers developed the disease after coming on duty. News Item, Sc. News Letter, Nov. 3, 1956.

BOOK REVIEWS

Psychiatric Aspects of School Desegregation. Formulated by the Committee on Social Issues. 95 pages. Price, \$1.00. New York: Group for the Advancement of Psychiatry, 1957.

This little book is the report of the Committee on Social Issues, of the Group for the Advancement of Psychiatry. Only 3 of its 13 members live below the Mason and Dixon line, and the report obviously favors desegregation, but the question is discussed more objectively than might have been expected. The statement is made in the introduction that "To speak of a Southern attitude as against a Northern attitude is incorrect. Anti-Negro discrimination and prejudice of course exist among northerners, and there are many segregated schools in the North . . . And opponents of desegregation form only a portion of the Southern communities."

Parenthetically, the attitude of the Carolina Hotel at Pinehurst toward Negro physicians underscores the statement that "Anti-Negro discrimination and prejudice exist among northerners."

The Committee believes that much of the prejudice against integration is based upon "myths" about the Negro—especially his sex life and his preference for a subordinate role in society. It believes that much of the prejudice stems from a guilt feeling over the poor treatment of the Negro in the past. It recognizes that the children are influenced greatly by the attitude of their elders, and that if let alone they would have comparatively little difficulty in adjusting to integration. "There is little doubt that where the parents as a group approved of desegregation, the problem of transition has been uneventful."

The report touches only lightly upon one of the most important effects, to the Negro, of desegregation. It is almost certain that relatively fewer Negro teachers would be employed under a wide desegregation program than were under the old order.

Both in the introduction and in the final sum-

mary, it is rather dogmatically assumed that desegregation is inevitable. "There is no question of whether or not desegregation will occur. It is already occurring . . . The process of desegregation is now definitely under way, although it proceeds at very uneven rates in different localities." It is recognized, however, that the transition is difficult and beset with many problems for both races.

Emotional Problems and What You Can Do About Them. By William B. Terhune, M.D. 190 pages. Price, \$3.00. New York: William Morrow and Company, 1955.

This is a well written, practical, and concise book of advice about personal mental hygiene. It discusses most of the common emotional problems that come at all ages of life.

It could have been written only by a man who has learned first hand from hundreds of patients what common problems are, and who has learned how to advise these patients.

It can be recommended both to doctors and laymen as an excellent guide for living.

BOOKS RECEIVED

Human Blood Coagulation. By Rosemary Biggs, Ph.D., M.D., and R. G. MacFarlane, M.D. 476 pages. Price, \$8.50. Springfield Illinois, Charles C Thomas, Publisher, 1957.

Pneumoencephalography. By E. Graeme Robertson. 482 pages. Price, \$14.50. Springfield, Illinois, Charles C Thomas, Publisher, 1957.

Hypophysectomy. Edited by O. H. Pearson, M.D. 154 pages. Price, \$5.00. Springfield, Illinois, Charles C Thomas, Publisher, 1957.

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The Month in Washington

The economy drive to the contrary notwithstanding, health spending by the Department of Health, Education, and Welfare for the fiscal year that began this July already is assured of surpassing last year's record by some \$33 million. This assumes, of course, that no further requests will be made by HEW for supplemental funds, a practice common in government for many years.

Research programs were the most favored by legislators, many of whom spoke out against federal spending by other agencies. But when the health budget came up for debate, the economy oratory subsided.

In only one instance was a health program cut back. And to the surprise of many, it occurred in the Senate which traditionally restores budget cuts originating in the House. A sum of \$45 million was voted, instead of the House-approved \$50 million, for grants to states for sewage treatment works construction. But then the Senate

wrote in language permitting states to get their maximum allotments a full year after the fiscal year ends.

The Hill-Burton hospital construction program received \$3.8 million less than last year, but only because the administration asked for \$121.2 million instead of the \$125 million appropriated last year.

The National Cancer Institute received the largest dollar increase of any health item in the budget. The increment was \$8 millions over last year. The administration had asked for \$48.4 million, the House voted \$46.9 million, and the Senate raised this to \$58.5. It was finally compromised at \$56.4 million.

Congress obviously agreed with the views expressed by the Senate Appropriations Committee: "... the committee is fully aware that it is providing funds for cancer research, the outcome of which is unknown. On the judgment of those who are scientifically most competent, the committee is fully willing to risk the investment on the ground that the chance of a big payoff is a reasonable one. Such risks are inherent in research."

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Diseases fared well, too, getting a total of \$20,385,000 compared with last year's \$17,885,000. And the Senate Committee charged the institute with taking leadership in research on effects of radiation on the human organism.

The Mental Health Institute's spending has been going steadily upward, and this year it was given another boost with a final appropriation of \$39,217,000, an increase of about \$4 million. Other research totals for the current year: National Health Institute, \$35,936,000; Neurology and Blindness Institute, \$21,387,000; Allergy and Infectious Disease Institute, \$17,400,000.

On only one score did the research advocates lose out. The House view prevailed in conference on the setting of a 15 per cent ceiling on additional overhead costs allowed schools and other institutions getting federal grants. This question, which drew considerable attention in hearings, is likely to be reopened. Congress wants a General Accounting Office study by the end of this year.

In voting a \$5 million increase (to \$22,592,000) for general public health assistance to the states, Congress was reaffirming its support of helping local health departments increase their professional staffs and broaden their services. The Senate Committee report contained this significant language:

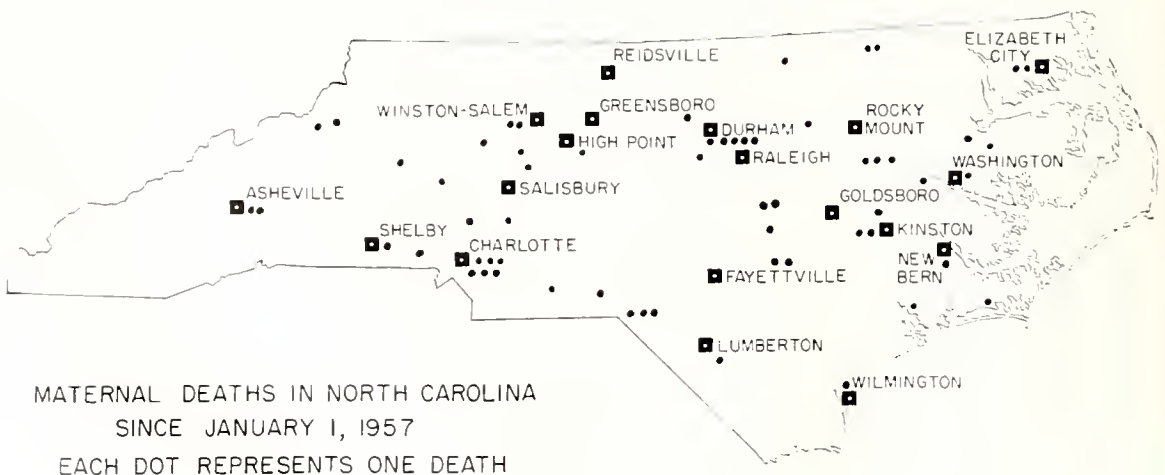
"... with a population increase of more than 20 million during the past decade,

there are no more organized health departments than there were 10 years ago. This means that 18 million people are living in areas with no full-time organized community health services, and millions more live in areas where such services are only fragmentary."

A few days later, the Public Health Service announced plans for a broad survey of rural health needs, particularly in sparsely settled areas. It picked for its first study Kit Carson County, Colorado, an area known for its scattered farm population, low income level and adverse climatic conditions.

* * *

The President has signed into law a two-year revision of the doctor draft law permitting selective call-up of physicians to age 35 if they were deferred from regular draft service to complete professional training . . . The poliomyelitis vaccine act expired July 1 with all but \$400,000 of \$53.6 million taken up by states for inoculation programs. An estimated 29 million children and pregnant women received 70 million injections. The Public Health Service has conferred with the American Medical Association on medical manpower plans in event of an epidemic of the new Far East influenza . . . The National Library of Medicine no longer is lending books and other material over the counter to individuals; requests must be channeled through other libraries.



NORTH CAROLINA

Medical Journal



Vol. 18 No. 9
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IN THIS ISSUE:

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Panel Discussion on Recent Man-Made Pathologic Processes

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Introduction

Moderator

J. U. GUNTER, M.D.

DURHAM

Man-made pathologic processes are nothing new. Studies in antiquity show that man has always played an important part in the production of many diseases with which he is afflicted. In the early millenniums man-made traumatic lesions caused by stones, clubs, tomahawks, slingshots, bows and arrows, and other primitive devices accounted for most of the man-made illnesses.

In more recent centuries, with the invention of gunpowder, firearms, dynamite, the automobile, the airplane, the atomic bomb, and scores of other destructive devices, man is today responsible for more human trauma than ever before.

The history of medicine is full of instances of illness resulting from therapeutic measures. The early medicine man must have observed untoward side effects from his use of herbs, extracts, and concoctions

of various sorts. And the early surgeon certainly recognized that some of his efforts made his patient worse than he had been before.

The development of a new disease state that can be attributed to sound therapy for another disease has long been recognized in clinical medicine. For instance, stomatitis and other side effects of mercurial therapy for syphilis have been known for centuries. Recently, disease states resulting from a variety of good therapeutic agents and devices have assumed a position of great prominence in medicine.

Our purpose in this panel discussion is to direct attention to some of the man-made diseases which have appeared in the past decade or two—diseases which would not have occurred if sound therapeutic procedures had not been employed. Since there is an abundance of material, we shall emphasize the man-made diseases of greatest interest to pathologists, with only brief mention of some of the others.

* * *

The Effect of Steroid Therapy on the Natural Course of Diseases

WALTER R. BENSON, M.D.*

CHAPEL HILL

Steroids have been used so widely in the treatment of patients within the past several years that a voluminous amount of material about their effects has been published. I have, therefore, restricted my discussion to four relatively narrow fields in which I have had some personal experience. These are:

1. Cortisone therapy and rheumatoid arthritis
2. Peptic ulcers occurring during cortisone therapy
3. Cortisone and corticotropin (ACTH) therapy and ulcerative colitis
4. Carcinoma in the breasts, associated with estrogenic therapy of carcinoma of the prostate.

Cortisone Therapy and Rheumatoid Arthritis

We recently studied the case of a 49 year old woman who had had rheumatoid arthritis for 10 years and who had been treated with corticosteroid drugs for three years before her death. She died of peritonitis following perforations of multiple peptic ulcers of the stomach and duodenum and of systemic rheumatoid disease. Rheumatoid nodules were found in all layers of the heart, in the aorta, the pulmonary artery, and a coronary artery, in the right lung and bronchial lymph nodes, in the capsular and subcapsular tissues of the spleen, and in the kidneys.

The question arose as to whether the steroid treatment could be responsible for such widespread lesions. Cases such as this have been reported occasionally for many years. The frequency of such reports, however, has increased remarkably in the past 10 years—approximately the same period in which steroids have been used extensively in the treatment of patients with rheumatoid arthritis. Thus from 1940 to 1949 only 8 cases were reported⁽¹⁾; since 1949, 26 cases have been published in the American-English literature⁽²⁾. Of these 34 patients, 23 (1,2a,c) had had no steroid drugs, whereas only 6 (2b,e,f,h-j) had had such treatment. In 5 instances^(2d,g,h), such data are not included in the reports.

In the foregoing case, the patient's aorta also contained lesions in the media and adventitia which were not rheumatoid nodules, but rather areas of necrosis with a nonspecific inflammatory reaction. Cases with similar lesions have recently been reported by Valaitis and others^(2k) and by Clark and others⁽³⁾.

Arterial lesions in rheumatoid arthritis have been described for many years. Recently these lesions have been reported with increasing frequency^(2j,4), and the suggestion has been made that in some instances they have been a result of steroid therapy. However, vascular lesions have been described in patients with rheumatoid arthritis who have not received cortisone and related compounds. These disorders vary from a nonspecific mild arteritis to necrosis and an intense inflammatory reaction indistinguishable from that of periarteritis nodosa^(1e,5). Slocumb⁽⁶⁾ and Rotstein and Good⁽⁷⁾ have described a syndrome of hypercortisonism and pseudo-rheumatism occurring in patients who had received too much cortisone and in patients who, having received too much cortisone, had had the amount of drug reduced too rapidly. Perhaps a delicate balance of cortisone therapy is required, and a more than slight deviation in either direction from an optimal level of the drug will produce similar undesirable effects in patients with a disease such as rheumatoid arthritis in which vascular lesions sometimes occur during the natural course of the disease.

A somewhat analogous relation was discovered by Robinson and associates⁽⁸⁾ in studying experimental infections in the rat. They found that adrenalectomized rats receiving no cortisone, and adrenalectomized and intact rats receiving 10 to 20 mg. of cortisone per day had a lower resistance to an intradermal injection of an inoculum of *D. pneumoniae*. However, adrenalectomized and intact animals which received 2.5 to 5.0 mg. of cortisone per day had an increased resistance to a similar injection of bacteria. All the above animals were compared with intact animals which had been

*From the Department of Pathology, School of Medicine, University of North Carolina, Chapel Hill.

similarly inoculated but had received no cortisone.

In summary, the use of steroids in the treatment of patients with rheumatoid arthritis has not been shown to affect the frequency or distribution of rheumatoid nodules in the viscera. The relation between arterial lesions occurring in these patients and the steroid therapy suggests a causal association. Present data are insufficient, however, to permit such a conclusion. Further studies are needed before a causal association can be attributed to the treatment.

Peptic Ulcers Occurring During Cortisone and Corticotropin (ACTH) Therapy

The record of the patient in the foregoing case will also serve as a basis for a discussion of the second topic. Microscopic study of these ulcers disclosed a decreased amount of inflammatory reaction in the ulcer bed and in the serosal surfaces, but other significant changes were not present.

Peptic ulcerations occur so frequently during treatment with cortisone and ACTH that a causal relationship has been accepted without reservation. Two recent studies indicate processes by which such ulcers may develop. Gray and associates⁽⁹⁾ found that in normal individuals the administration of ACTH resulted in a marked increase in the concentration of hydrochloric acid and pepsin in the gastric juices. Hirschowitz and co-workers⁽¹⁰⁾ reported that the administration of ACTH resulted in a moderate, progressive increase in the concentration of pepsin and a slight increase of the mean acid concentration, but that the viscosity and the amount of mucus was decreased in the gastric secretions. They suggested that the latter changes may be of significance in the pathogenesis of peptic ulcers occurring during ACTH therapy.

Cortisone and Corticotropin Therapy and Ulcerative Colitis

We recently had an opportunity to perform an autopsy on a 14 year old girl who had had symptoms and signs of severe ulcerative colitis for about four months before her death. Steroid therapy was begun approximately a month before her death. She died with peritonitis following perforations of the colon. In this instance we wondered, of course, if the treatment had any causal relation to the perforations.

The value of steroid drugs in the treatment of ulcerative colitis, both acute and

chronic, has been well established. Kirsner and Palmer and their associates⁽¹¹⁾ have recently compared the results of treatment in the pre-steroid era with those of steroid treatment⁽¹⁰⁾. Of 100 patients reported in 1948^(11a), 53 per cent were benefited by medical treatment. Fourteen died; nine of these deaths were due to peritonitis secondary to perforations. Four of these patients were under 20 years of age, and the duration was less than a year in three instances. Of the 180 patients studied in 1955^(11b,c), a satisfactory response to nonsurgical treatment was obtained in 85 per cent. There were 12 deaths, 6 of which could be attributed in part to steroid therapy. Only 2 deaths were due to perforation and consequent peritonitis. One other patient also had a perforation and peritonitis, but recovered. Truelove and Witts⁽¹²⁾ compared a series of 109 patients treated with cortisone with a series of 101 patients treated by other means. They concluded that cortisone did not appear to increase the risk of complications such as hemorrhages and perforation. The mortality of their cortisone-treated patients was lower than that of the other patients.

The case of the 14 year old girl was selected as an example of the rapidly progressive and frequently fatal course of ulcerative colitis in the younger age group. The steroid treatment may have had some causal association with the perforations, but conclusive evidence of this relationship is lacking. Conversely, before the use of steroids in treatment, these patients more frequently had perforations than did those in the older age group.

Carcinoma in the Breasts Associated with Estrogenic Treatment of Prostatic Carcinoma

A 63 year old man was being treated with an estrogenic substance for carcinoma of the prostate. Approximately one and one-half years after treatment was begun, his breasts were enlarged, hard, and painful. They were thought to contain estrogen-induced bilateral carcinomas. When the breast tissues were examined microscopically, however, the carcinoma was interpreted as metastatic from the prostatic tumor rather than primary breast tumors.

Fifteen cases of carcinoma in breast tissues associated with estrogenic treatment of carcinoma of the prostate have been reported in some detail⁽¹³⁾. In 2 of these the tumors probably were primary tumors of

the breast, but, as will be discussed later, coincidental carcinomas of the breast and prostate without estrogenic treatment have been reported. In 6 cases, the tumors in the breast tissues were probably metastatic from the prostatic tumor. In 7 cases, the data are not sufficient for evaluation. Other cases reported briefly include 4 instances interpreted as metastases from prostatic carcinoma to the breasts, 7 cases of coincidental primary tumors in the breast and prostate without endocrine therapy, and 4 instances in which primary carcinoma of the breast was thought to have developed following estrogenic treatment of patients with carcinoma of the prostate.

It is apparent from this short review that a definite causal association between estrogenic therapy and the development of breast carcinoma in men has not been demonstrated.

The form of treatment may have some effect, however, on the localization of metastases in the breasts. Most of the cases reported occurred in the period when hormonal treatment was used. The increased incidence of these unusual metastases may be due in part to changes occurring in the breast tissues as a result of hormonal therapy. These are an increase in a loose-textured fibrous tissue and an increased vascularity, resulting in gynecomastia. These changes may result in more tumor cells being carried to the breast tissues and may provide a more favorable medium for the growth of the tumor cells than the usual male breast tissues.

Summary

Steroid therapy and some of the complication of such treatment have been discussed in relation to rheumatoid arthritis, peptic ulcers, ulcerative colitis, and prostatic carcinoma.

An uncommon case of rheumatoid arthritis with widely scattered rheumatoid nodules in the heart, lungs, lymph nodes, and spleen has been presented. Peptic ulcerations occurred during cortisone treatment. Factors possibly responsible for such ulcerations occurring during steroid therapy have been mentioned.

A case of fulminating ulcerative colitis in a young girl has been presented in which ACTH and cortisone treatment apparently had little effect on the course of the disease.

An instance of prostatic carcinoma with

metastases to the breasts has been presented. The relation of estrogenic therapy to this uncommon site of metastases has been discussed.

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* * *

Disease States Resulting from Antibiotic Therapy

BERNARD F. FETTER, M.D.*

DURHAM

Every organism, be it unicellular or multicellular, is constantly struggling to exist. Whenever several species live in the same environment, a balance of power is struck. Such a balance should be upset only after profound deliberation, and one should be prepared to accept the consequences. When man has altered the balance of power in nature, the results have not always been satisfactory. The mongoose, for example, was imported to Jamaica to eliminate the rat; but when it had done its job, the mongoose became as great a pest as the rat, since the mongoose had no natural enemy in Jamaica.

Microorganisms, in nature, are also organized into a balance of power. The antibiotics probably originated from this incessant struggle. Some of the organisms are able to elaborate substances which inhibit the growth of their neighbors; others elaborate lethal compounds. If one can apply deductive reasoning to nature, one can say that the predominant antagonism in the microscopic world is between fungus and bacterium, since our most useful antibacterial antibiotics are derived from fungi.

The human body is covered by organisms whose number and species remain relatively constant. Those on the skin are insignificant as far as the present discussion is concerned. We will concern ourselves with those of the digestive tract. During intrauterine life this tract is sterile. By the time the individual is several days old, he has acquired a bacterial flora in the digestive tract⁽¹⁾. When the balance of power in this flora is upset, as by antibiotic therapy, serious disease may result^(1,2). The complication which usually results is a fungus infection produced by those organisms which are indigenous to man, namely *Candida albicans*, *Aspergillus*, *Penicillium*, *Cryptococcus*, and *Geotrichum*. The reason that the fungi begin to grow on antibiotic therapy is not known precisely. The most likely explanation is the concept of the balance of power, wherein the bacteria by their growth have inhibited but not eliminated the fungi. When the bacteria are killed or substantially reduced, the loss of inhibition permits the fungi to multiply.

Conditions Produced by Upsetting the Balance of Power

Fungus diseases

Brown and others⁽³⁾ cite 3 cases of vis-

*From the Department of Pathology, Duke University School of Medicine, Durham.

ceral moniliasis. One of their cases was diagnosed as pneumonia due to *Monilia*; the second case, a perinephric abscess; the third, a generalized infection with lesions in the brain, myocardium, and kidneys. The common denominator in all 3 cases was extensive antibiotic therapy. In these cases the *Monilia* became invasive while the patient was being treated. In at least 2 of the cases the organism probably entered through the mouth, although entrance through other portions of the intestinal tract also occurs. We have seen instances of thromboses in the portal veins due to fungi other than *Monilia* which, from their location, were thought to have entered through the intestinal tract.

Smith⁽¹⁾ cited an unusual case from this hospital of a patient with bronchiectasis. Preliminary cultures were reported as containing *Micrococcus pyogenes var aureus*. The patient was treated with penicillin, and within a short time the micrococcus was replaced by *Escherichia coli*. The penicillin therapy was stopped and streptomycin was given. The coliform organism disappeared and the micrococcus was again cultured. A combination of penicillin and streptomycin was given. On this regimen the micrococcus disappeared, but its place was taken by *C. albicans* and *Aspergillus fumigatus*. Because there is no drug available for these latter organisms, the antibiotics were discontinued. The micrococcus returned to the lung. The patient refused operation and died subsequently of a brain abscess.

The problem of the foregoing case is different from those previously cited. In the case just described it would appear that all organisms mentioned were present in the lung originally but that the micrococcus was able to suppress their growth. When this organism was inhibited, the coliform organisms readily grew but were able to suppress the growth of the fungi. It was only when both bacteria were greatly reduced that the fungi were able to grow. The situation is entirely analogous to what may happen in the intestinal tract.

The incidence of fungus diseases produced by endogenous fungi is increasing with the widespread use of antibiotics.

Enteritis

A second disease process produced by upsetting the balance is enteritis. One of the mechanisms here, as in the preceding

condition, is that susceptible organisms are killed. Occasional patients harbor an antibiotic-resistant staphylococcus whose growth has been suppressed by its neighbors. When the inhibitors are killed, the staphylococcus flourishes. Thus resistant staphylococci constitute the majority of intestinal flora. As a result of elaboration of toxins by this agent, diarrhea is produced—a form of internal food poisoning. The cure of the process is relatively simple. If the antibiotic is discontinued, the normal flora multiply and by their multiplication inhibit the growth of the staphylococcus.

Vitamin deficiencies

Vitamin deficiencies may also result from antibiotic therapy. The role of intestinal organisms in the production of vitamin K is well recognized. What is not so well known is the fact that many of the B-complex vitamins are also elaborated by bacteria⁽⁴⁾. The amount of vitamins produced by the intestinal flora has little significance when one considers the full fed animal. The malnourished patient presents a different problem. With the decreased intake of foods, the role of intrainstestinal vitamin production becomes significant. Vitamin deficiencies may then develop when such patients are receiving antibiotic therapy.

Conclusion

From the foregoing it is obvious that an intimate relationship exists between the patient and his organisms, and between the many species of organisms. In using antibiotics we are using weapons developed by organisms in their struggle for existence. Such a procedure greatly alters the status quo of the intestinal tract, and dire consequences may result. It is again recommended that since antibiotics are a two-edged sword, they should not be used except when absolutely necessary and for no longer than necessary. The indiscriminate use of antibiotics may be fatal.

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Iatrogenic "Allergic" Vascular Disease

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CHARLOTTE

One of the dilemmas confronting the physician today is the great variety of potentially unpleasant and occasionally alarming sequelae to apparently proper and accepted methods of treatment. The possibility of iatrogenic disease seems at times to approach the number of therapeutic techniques available. If an ubiquitous essential system such as the vascular apparatus should be afflicted, the results could be most devastating.

Vasculitis, or inflammation of the vessels, is a common, often nonspecific phenomenon associated with local tissue disturbances such as trauma, inflammation, infection, and tumor. In the absence of the commonly encountered related conditions, more diffusely disturbed forms of vasculitis offer for consideration the possibility of an allergic etiologic factor, proof of which in any given case is difficult or impossible. Available evidence indicates that certain vasculitides may be related to substances administered for the relief of some other, perhaps less formidable, disease.

Review of Literature

Gruber first suggested in 1925⁽¹⁾ that periarteritis nodosa, described by Kussmaul and Maier⁽²⁾ more than a half century previously, might be related to hypersensitivity to a foreign substance. Prior to 1925, a uniform consensus concerning the morphology of the disease prevailed, but the predominating etiologic factor was debated. Congenital weakness of arterial walls was considered⁽³⁾ and refuted⁽⁴⁾. Most authorities favored a generalized infection, either specific or nonspecific, as the cause^(4,5).

Stimulated by Gruber's suggestion, several German students⁽⁶⁾ argued the possible relationship of an allergic factor to periarteritis nodosa, and produced similar lesions in experimental animals by the injection of foreign proteins. Their studies frequently concomitantly included rheumatic fever, which they also discussed in relationship to periarteritis nodosa. Rich⁽⁷⁾ stimulated the profession in this country to consider seriously an allergic factor in periarteritis no-

dosa when he presented several instances of the disease in patients who had suffered hypersensitivity reactions following therapeutic injections of foreign sera or administration of sulfonamides. In addition to strong circumstantial clinical evidence, Rich referred to the vascular damage known to occur with the Arthus phenomenon, particularly fibrinoid necrosis, and cited the experimental work of earlier German workers. With Gregory⁽⁸⁾, he experimentally produced the lesions in previously unsensitized rabbits by single massive injections of horse serum. Their experiments have not been uniformly confirmed⁽⁹⁾ either qualitatively or quantitatively; but dissimilar individual susceptibility, an obvious factor in human pathology, must be taken into consideration, as well as dissimilar species susceptibility. Following the reports of Rich⁽⁷⁾, and Rich and Gregory⁽⁸⁾, the literature is charged with classifications of allergic arteritis, reports of additional cases, incrimination of various therapeutic agents, and experimental attempts to produce arteritis.

Zeek^(9b,10), recognizing the tendency to designate a variety of vascular diseases as "periarteritis nodosa," has suggested, on the basis of both pathologic and clinical studies, the following classification for necrotizing angiitis:

1. Hypersensitivity angiitis
2. Allergic granulomatous angiitis
3. Rheumatic angiitis
4. Periarteritis nodosa
5. Temporal arteritis.

In addition, Zeek encountered a residue of unclassified necrotizing vasculitides. Since rheumatic angiitis, a rare phenomenon, is uniformly associated with fulminating rheumatic fever, and temporal arteritis is a localized specific lesion, neither with any known association to exogenous drugs, they will not be considered, despite the fact that some allergenic factor may be related, especially to the former⁽⁶⁾. The latter may be a reaction to some unexplained destruction of elastica in the vessel wall⁽¹¹⁾. We have not included lupus erythematosus, because usually vascular involvement, except for the glomerular capillaries, is an

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insignificant part of the pathologic picture in the vast majority of cases^(12a). To our knowledge, no therapeutic agent, except Aapresoline, produces a similar picture.

Periarteritis nodosa

Zeek^(9b,10) considers classic periarteritis nodosa to be a disease of muscular arteries, chiefly at points of branching at or near the hilus of organs, and usually manifest by lesions of various ages or stages, of which five are described⁽¹³⁾, including a healed stage. These are comparable to similar experimental lesions in the rat. Briefly, the earlier stages are manifest by adventitial fragmentation and edema with subsequent fibroblastic proliferation, all which precede the inflammatory infiltration and fibrinoid necrosis in the wall. Thereafter occurs organization and scarring. Classic periarteritis is clinically manifest by a long clinical course characterized by gastroenteric symptoms, peripheral neuropathy, usually hypertension, and occasionally eosinophilia.

Severe hypersensitivity angiitis

In contrast, cases classified as hypersensitivity angiitis by Zeek and her co-workers⁽¹⁴⁾ were clinically manifest as a fulminating disorder terminating fatally in a few days to a few weeks, and characterized by fever, skin rash, nephritis, and myocarditis. There was frequently a history suggesting recent exposure to some antigenic substance. By further contrast to periarteritis nodosa, pathologic lesions occurred in smaller vessels, both arteriolar and venous, implicating the pulmonary circulation and splenic follicles, which are spared in classic periarteritis nodosa. Moreover, in hypersensitivity angiitis, the lesions were all of approximately the same age, characterized by fibrinoid necrosis and pleomorphic exudation, with little or no fibroblastic proliferation. There was no evidence of healing. These patients experienced a rapidly lethal disease, terminating in azotemia.

Hypersensitivity angiitis: mild syndromes

More recently, McCombs and others⁽¹⁵⁾ have described several much less severe, usually benign, syndromes, which may merely represent a much milder form of Zeek's hypersensitivity angiitis. The interested reader is referred to McComb's paper for the details of the syndromes described, which were shown by clinical picture and

muscular and cutaneous biopsies to be one of the following:

1. "Id" reaction
2. Urticaria and angioedema
3. Vascular anaphylactoid purpura
4. Erythema nodosum
5. Dermatomyositis
6. Vasculitic edema
7. Unclassified syndromes.

According to the clinical syndrome, the patients of McCombs and others showed variously arthralgia, purpura, edema, fever, weight loss, pleuritis or pneumonia, subcutaneous nodules, dermatitis, myalgia or weakness, urticaria, neuralgia, parasthesias, and gastrointestinal bleeding. Anemia occurred in association with uremia or gastrointestinal bleeding. Leukocytosis was occasional and eosinophilia frequent. The sedimentation rate and gamma globulin were occasionally elevated, and hematuria and albuminuria occurred with renal involvement. Liver function studies were rarely altered. The cutaneous syndromes uniformly presented inflammation and fibrinoid necrosis, implicating all coats of small vessel walls, both arterial and venous. The degree of involvement varied in intensity, age, and extent of reaction from case to case, and from vessel to vessel in a given case. Vessel walls were commonly saturated with fluid, fibrin, or leukocytes, and at times there were necrosis and lysis, with thrombosis or complete destruction of the vessels. Edema, deposition of fibrin, and occasionally interstitial hemorrhage and leukocytic infiltration occurred in adjacent tissue. Infrequently, later healing stages showed perivascular lymphocytic cuffing and recanalization. In muscles, vasculitis was associated with various forms of muscle fiber degeneration, necrosis, lysis, and non-suppurative inflammation.

Fifteen of the 30 patients with these syndromes have completely recovered. Only 4 (2 with vascular anaphylactoid purpura and 2 in the group of unclassified syndromes) have died, all of renal failure and uremia.

Allergic granulomatous arteritis

Allergic granulomatous arteritis and Wegener's syndrome constitute another group of hyperergic vascular lesions. Churg and Strauss⁽¹⁶⁾ presented 13 cases of allergic granulomatous arteritis. Severe asthma, fever, hypereosinophilia, and symptoms

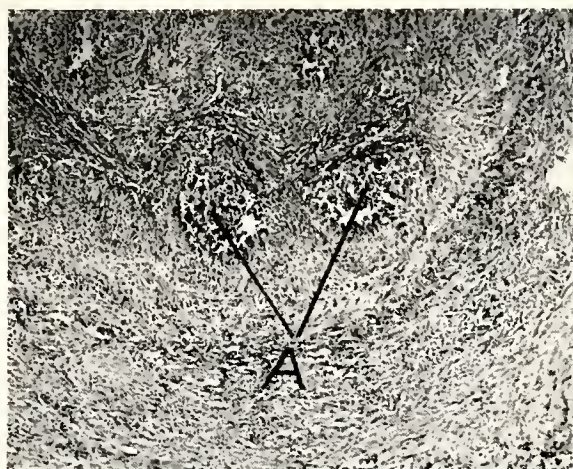


Fig. 1. Granulomatous angiitis. Approximately one third of the circumference of the vessel wall is included. Lumen beyond upper edge occluded by granulation tissue. Note granulomas at A. (50 X)

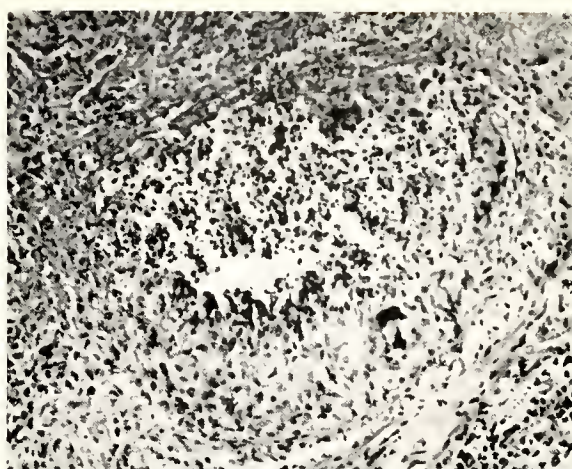


Fig. 2. One of granulomas in fig. 1. Epithelioid and giant cells about central detritus, largely composed of eosinophils. (150 X)

of vascular insufficiency in various organs summarize the clinical features. Nodular enlargement of vessels, thereby resembling periarteritis nodosa, was a frequent finding. The constant implication of pulmonary vessels, however, was in contrast to periarteritis, as was the occurrence of widely disseminated interstitial granulomas. Vessels showed not only all stages of vasculitis, ranging from acute fibrinoid necrosis to healed fibrosed lesions, but more or less discrete nodular granulomas characterized by radially arranged cells resembling epithelioid cells, and giant cells. Similar granulomas, centered about degenerating and necrotic eosinophils, were discovered also in the extravascular connective tissue in a variety of organs and sites. Their presence in the deeper cutis, subcutaneum, or available muscle sites permits biopsy diagnosis.

Churg and Strauss found rarely isolated similar lesions in surgical specimens. Through the courtesy of Dr. John Gregory we have seen a similar isolated subcutaneous lesion of as yet uncertain significance (figs. 1 and 2). Churg and Strauss postulated an allergic factor in the development of the disease because of (a) the constantly associated asthma, (b) the comparable occurrence of eosinophilic and granulomatous inflammation in Loeffler's syndrome and parasitic infestations, and (c) the fibrinoid necrosis and similarity to periarteritis nodosa. Allen^(12b) states forthrightly that allergic granulomatous arteritis may begin

after the administration of sera or sulfonamide drugs.

Wegener's granulomatosis

Wegener's granulomatosis, accompanied by no clinical manifestations of allergy, is characterized in addition by aggressive necrotizing granulomatous lesions of the upper as well as the lower air passages, and a diffuse necrotizing glomerulitis. It has been considered to be closely related to the syndrome described by Churg and Strauss. (Godman and Churg⁽¹⁷⁾ and Fahey and others⁽¹⁸⁾.) This relationship, however, may involve microbial agents or their products. We know of no case in which drugs are strongly suggested as an etiologic factor, though sufficient evidence may yet accrue to incriminate them⁽¹⁷⁾.

Among the therapeutic agents reported to be responsible for various allergic angitides in human beings, have been therapeutic sera, sulfonamides^(7b,8), penicillin⁽¹⁵⁾ (see figs. 3 and 4), and iodides^(15,19), (fig. 5*), thiourea⁽²⁰⁾, and Dilantin⁽²¹⁾. Possible agents have been dimethisoquin (Duotane) ointment, phenylbutazone, quinidine, phenobarbital, aspirin, streptomycin, para-aminosalicylic acid, anacin, neomycin, gramicidin, chloramphenicol, and azochloramid⁽¹⁵⁾. Interestingly, degenerating tumors have been thought to be responsible^(15,22).

A variety of experimental manifestations⁽¹⁰⁾ of dubious significance to the human syndromes have produced fibrinoid

*Kindly provided by Dr. P. Kimmelstiel.

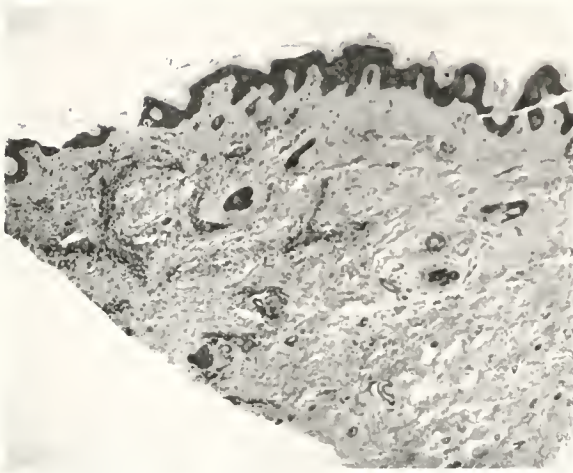


Fig. 3. Allergic purpura due to penicillin (skin biopsy). Note pan-vascular inflammation in left half of dermis. (40 X)

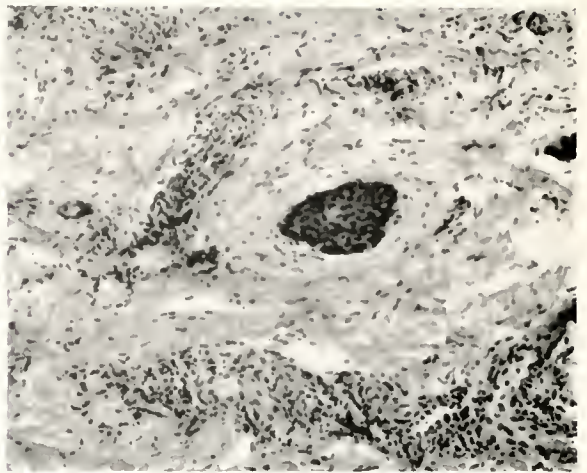


Fig. 4. Same case as fig. 3, showing vascular inflammation and necrosis. (100 X)

necrosis in vessels. Some of these procedures are related to hypersensitivity phenomena. The most ingenious direct evidence for a hypersensitivity factor, at least in the investigations of periarteritis nodosa, is the recent demonstration of localized human gamma globulins at sites of fibrinoid necrosis by Mellors and Ortega⁽²³⁾. Utilizing a histoserologic technique, they showed that the zones of fibrinoid necrosis exhibited a marked affinity for rabbit anti-human-globulin serum.

Comment

The development of our present concepts of vascular diseases has been a slow process of evolution, accelerated in the last decade. With reasonable assurance, experience indicates that certain vascular degenerative inflammatory disorders are related to allergic phenomena and probably to a wide range of allergic substances. Among these is a variety of therapeutic agents. In our modern world of synthetics, possible exposure to the broad spectrum of potentially noxious substances, including therapeutic agents, becomes incalculable. The identification of the offending agent, or drug, may be difficult. Therefore, the careful observations made by such workers as Rich⁽⁷⁾, McCombs and colleagues⁽¹⁵⁾, as well as others, are perhaps even more tenable. A most careful inquiry into possible exposure to some noxious substance is essential, and particularly when there have been repeated exposures. Temporal relationships and serial events must be critically evaluated in our

efforts to uncover specific probable and potential offenders.

In addition to the circumstantial evidence, the morphologic similarities of the various types of "allergic" vascular lesions would suggest the possibility of similar etiology and pathogenesis. Admitting the dissimilarities of distribution, size of vessels, and clinical syndromes resulting, the uniform occurrence of fibrinoid necrosis deserves attention. The possible relationship between some instances of fibrinoid necrosis and an allergic status has been indicated in the literature, as mentioned previously. The histoserologic techniques applied by Mellors and Ortega⁽²³⁾ would seem to offer fairly substantial proof of an antigen-antibody

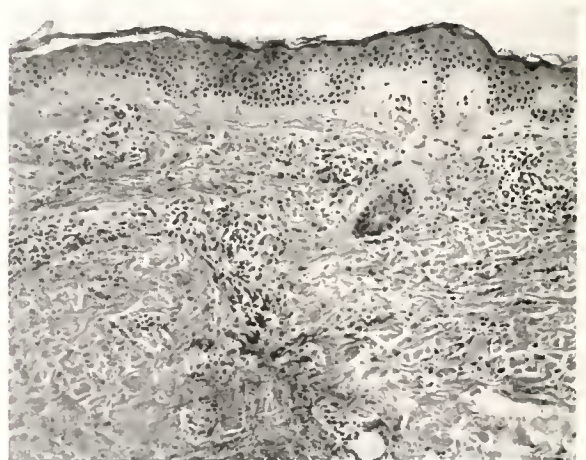


Fig. 5. Allergic purpura due to Skiodan. Note pan-vascular inflammation throughout small vessel walls, and necrosis in lower center. (200 X)

Table 1
Correlation of Allergic Latrogenic Angiitides

<i>Type</i>	<i>Clinical Features</i>	<i>Duration of Terminal Illness</i>	<i>Predominant Distribution</i>	<i>Stages of Lesions</i>	<i>Associated Lesions</i>	<i>Exposure to Latrogenic Agent</i>
Periarteritis nodosa	Multiple system disease, fever, polyneuritis	Several months to year or more	At or near bifurcations Widespread. Usually sparing pulmonary vessels and splenic follicular arterioles	Varied, from acute to healed segmental scars with aneurysms. Proliferation precedes exudation in adventitia	Sequelae of vascular occlusion	Frequently known or at least strongly suspected
Hypersensitivity angitis a. Severe (Zeek)	Hypersensitivity to known therapeutic agent	Few days to few weeks	Small arteries, arterioles, venules, capillaries	Kidneys, heart, widespread, and often in pulmonary vessels and splenic follicular arterioles	Interstitial inflammation, Necrotizing glomerulitis	Often known
b. Mild (McCombe) "Allergic" vasculitis	Various syndromes 1. "Id" reaction 2. Urticaria and angioedema 3. Vascular anaphylactoid purpura 4. Erythema nodosum 5. Dermatomyositis 6. Vasculitis edema 7. Unclassified	Usually not fatal. Four of 17 patients in groups 3 and 7 died, all of renal failure	Arterioles and capillaries in deep corium and muscle (biopsy). Glomerulitis in kidney of 4 fatalities. Hematuria and albuminuria in less than half	?	Glomerulitis in less than half (clinical evidence)	Often known
Allergic granulomatous angitis	Asthma, fever, eosinophilia	Several months to several years	Any vessel	Heart, widespread, often pulmonary vessels and splenic follicular arterioles	Various. Granulomas about exudate of necrotic eosinophils	Postulated possibility
a. Wegener's granulomatosis	Persistent respiratory infection renal failure, fever	Few months to 2 or 3 years. One case four years	Small arteries and veins	Widespread, including lungs, and splenic follicular arterioles	Varied from acute to scars. Sectoral adjacent to granulomas	None known. Apparently an allergic factor exists
					Destructive granulomas in lungs and often upper respiratory tract. Sequelae of vascular occlusion. Focal necrotizing glomerulitis and occasional granulomas	

mechanism or sensitivity status in periarteritis nodosa. It remains to be determined if their unique findings will be confirmed by others, and more significantly, whether similar conclusions can be drawn when histoserologic studies are extended to the other types of "allergic" angiitis.

The third feature of similarity of the various angiitides is the response to cortisone, which, though not curative, is more often than not attended by at least a transient improvement. This is much more striking in the milder variations of hypersensitivity angiitis and periarteritis nodosa, but not without occasional detectable improvement in the other syndromes. The effects of cortisone and ACTH, however, are yet too irregular to permit accurate prediction of results, good or unfavorable, in a given case.

Other than the utilization of ACTH or cortisone, the management of the various hyperergic vascular disorders has been largely symptomatic and supportive, especially when applied to the more ominous forms. The offending agent should be identified, if possible, and removed. In many instances of the milder forms of hypersensitivity, or iatrogenic vasculitis, this might be sufficient. Possibly some instances could be, and perhaps have been, prevented by withholding the administration of substances to which there is a history of sensitivity, or to which sensitivity has been suggested by appropriate clinical tests.

The following classification of "allergic" angiitides summarized in table 1 might be suggested:

1. Periarteritis nodosa
2. Hypersensitivity angiitis
 - a. Severe type (Zeek)
 - b. Milder syndrome (McCombs and others)
3. Allergic granulomatous angiitis
 - a. Wegener's syndrome.

Table 1 summarizes the essential differences and comparisons. We are fully cognizant of the objections of any attempt at rigid classification. Our experience indicates that a certain amount of overlapping of both clinical and morphologic findings may in some instances be frustrating. However, recognition of apparent differences, and analysis of stated classifications of disease entities, or groups of similar diseases, ultimately stimulates the debate which leads to confirmations, refutations, and synthesis of experience resulting in further under-

standing and more accurate classification of disease. The classification has the practical application of prognosis, as indicated in table 1.

Summary

The history of the development of our present concepts of allergic vascular disease has been briefly reviewed. A variety of known and strongly suspected allergenic agents has been listed. Since most of these are therapeutic preparations, some cases of "allergic" vascular disease are therefore truly iatrogenic.

A classification of allergic iatrogenic vascular disease has been suggested. Although specific allergenic agents have never been demonstrated to play a role in Wegener's granulomatous angiitis, available evidence indicates the possibility that this type of angiitis could be due to exogenous substances, including therapeutic agents.

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Disease States Resulting From Certain Drugs

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The well known anti-thyroid effect of the thioureas and related compounds—thiouracil, propylthiouracil, and methimazole (Tapazole)—resides in the fact that they prevent oxidation of iodide to elemental iodine in the thyroid⁽¹⁾. As a consequence, iodination of the tyrosine molecule does not take place, and the fundamental building block of thyroxine, diiodotyrosine, is not produced. Lack of thyroxine increases the amount of thyroid-stimulating (thyrotropic) hormone, not only because the pituitary produces more, but also because the thyroid-stimulating hormone (TSH) is not being inactivated by the thyroid. Hyperplasia and hypertrophy of the thyroid results, as indicated grossly by a symmetrical increase in the size of the organ, and microscopically by an increase in the height of the acinar lining cells, the infolding of these cells into the acinar lumens, and the disappearance of colloid. Clinically there is an onset of progressive hypothyroidism with a decrease in I^{131} uptake, decrease in protein-bound iodine and decrease in oxygen consumption. A

granulocytosis or a granulocytopenia may occur especially in association with thiouracil or methimazole therapy⁽²⁾.

Thiocyanates cause thyroid hyperplasia by a slightly different method—that is, by preventing iodide uptake by thyroid cells. Thiocyanate remains in the extracellular fluid in most organs, but in the thyroid is taken up by the cells, leaving less room for the iodide. The fact that administration of excess iodide can prevent or cure thiocyanate goiter suggests that this explanation is true⁽¹⁾.

Kriss, Carnes and Gross⁽³⁾ have reported hypothyroidism and thyroid hyperplasia in 5 patients, most of whom were children, who were receiving cobaltous chloride for treatment of anemia. Visible goiters occurred in 3, and 3 yielded laboratory evidence of depressed thyroid function. One had severe myxedema. Thyroid hyperplasia was attributed to cobalt inhibition of enzyme reactions in the conversion of iodine to thyroxine. All the patients recovered within several weeks after the drug was stopped.

Klinck⁽⁴⁾ was able to find microscopic evidence of thyroid hyperplasia in 10 children, 5 of whom had had cobaltous chloride with iron, and 5 of whom had received no cobalt. It was not possible to distinguish between the two groups by histologic methods. Others have failed to show a goitrogenic effect for cobalt in rats⁽⁵⁾, children⁽⁶⁾ or pregnant women⁽⁷⁾. Cobalt may cause a rapid onset of polycythemia⁽⁵⁾.

Phenylbutazone (Butazolidin) is unrelated chemically to any other known antithyroid substance, but does inhibit I¹³¹ uptake in rat and man. In one case report⁽⁸⁾ an arthritic woman, aged 60 years, developed goiter after 15 months of therapy. Upon withdrawal of Butazolidin, the goiter disappeared only to reappear a month after the drug was readministered. When the drug was stopped the second time, the goiter disappeared. The actual mode of action is unknown.

Effects of Antihypertensive Drugs

The antihypertensive agents, hydralazine hydrochloride (Apresoline) and hexamethonium, will be considered next. Following prolonged administration of hexamethonium, Turner and Lansbury⁽⁹⁾ have noted a relentless progressive dyspnea due to acute interstitial pulmonary fibrosis that may result in death within 30 days. About 13 such cases have been reported⁽¹⁰⁾.

The hydralazine syndrome has been the subject of several presentations^(9,11). It occurs in hypertensive patients who have been successfully treated with hydralazine hydrochloride. In one series, the syndrome appeared in about 10 per cent of the patients. The average dosage was about 640 mg. per day taken for a mean period of about 12 months. Phases of the syndrome resemble rheumatoid arthritis and lupus erythematosus. Initially there are chills, migratory arthralgia, and myalgia. The sedimentation rate is elevated and the hemoglobin reduced. Later, there is frank arthritis. If therapy is stopped, the syndrome usually subsides, but it may be reactivated by resumption of the drug. If therapy is not stopped, the lupus erythematosus stage may appear. This is manifest by fever, prostration, effusions in various body cavities, cutaneous sensitivity to ultraviolet light, lupus type rashes, splenomegaly and lymphadenopathy. Also present may be decreased serum albumin, increased alpha and gamma globulins, false

positive serologic tests, anemia, neutropenia, and occasionally LE cells in blood or marrow. Cessation of the drug with or without ACTH or cortisone has led to recovery from this phase. The syndrome is not invariably evoked by resumption of Apresoline, and may persist on withdrawal, suggesting that the response is probably not allergic⁽⁹⁾.

Others^(11a) have noted a similarity between hydralazine syndrome, serum sickness, and collagen disease. They suggest that hydralazine might combine with body protein, forming an antigenic complex which causes the clinical findings. Perry and Schroeder^(11c) believe that depletion of a necessary substance is the cause. Dustan and his associates^(11b) attribute it to altered tissue metabolism.

The rather frequent occurrence of hypotension in patients with rheumatoid arthritis has led Turner and Lansbury⁽⁹⁾ to speculate on the relation between this situation and the occurrence of the rheumatoid phase in patients with drug-induced hypotension. They suggest that diversion of blocked efferent neural discharges may be precipitating or exacerbating factors in collagen disease. The syndrome may be differentiated from classic lupus by erythematosus: (1) remission when therapy is stopped; (2) only a small number of LE cells; (3) paucity of hematuria and proteinuria; (4) frequent recurrence of pneumonitis.

Hepatic Disorders

With the advent of chlorpromazine (Thorazine), patients were noted who developed icterus apparently unrelated to dosage or duration of therapy⁽¹²⁾. The incidence has been reported variously from 3 in 71 to 1 in 500 cases⁽¹⁰⁾. Laboratory findings are those of obstructive type jaundice. Tests for hepatic cell function are normal. The direct serum bilirubin, total cholesterol, and alkaline phosphatase are elevated, and cephalin-cholesterol flocculation is normal. Laparotomy reveals no extrahepatic bile duct obstruction^(12a). Liver biopsy shows bile stasis with plugging of biliary canaliculi and little or no inflammatory cell infiltration. Hepatic cells seem generally uninvolved. Several deaths have been reported^(12b), but in general recovery has followed cessation of therapy, the jaundice clearing slowly. The pathogenesis is unknown, although increased viscosity of

the bile is thought to be of importance. Some authors^(12a) have noted the presence of eosinophils in the blood and liver and suggested hypersensitivity to the drug as the cause, while others^(12c) cite the slow response to steroids as evidence against an allergic origin.

Similar clinical, laboratory and histologic findings have been reported in patients receiving thiouracil^(2a), methimazole^(2b,13), arspenamine⁽¹⁴⁾ and methyl testosterone⁽¹⁵⁾. A toxic hepatitis associated with liver cell damage, inflammatory cell infiltration, and positive laboratory tests for hepatocellular damage has been reported for many drugs but more recently phenylbutazone⁽¹⁶⁾ and phenacetyl urea (Phenurone)⁽¹⁷⁾ have been added to the list.

Neurologic Disorders

Barsa and Kline⁽¹⁸⁾ have reviewed their experience with 200 disturbed psychotics who were being treated with *Rauwolfia serpentina* (Reserpine). Grand mal seizures occurred in 3, but some had a previous history of convulsions. Typical Parkinsonism occurred in 10. Cessation of therapy, decrease in dosage or, in some cases, continuation of therapy caused these manifestations to disappear.

Blood Disorders

In recent years, with the widespread use of anticoagulants, the occurrence of hemopericardium in association with an acute myocardial infarction without rupture of the myocardium has been reported⁽¹⁹⁾. Hemorrhage into the pericardial cavity is thought to originate by diapedesis of erythrocytes from the capillaries of the subepicardial infarcted myocardium. The role of bishydroxycoumarin has been the object of much study, for hemopericardium has occurred in patients who were not being treated with anticoagulants. The Massachusetts General Hospital group^(19d) reports that there has been a threefold increase in hemopericardium without rupture and a twofold increase in rupture in those receiving anticoagulants. As the anticoagulant effect increases, so does the frequency of hemopericardium. Hemopericardium of this type has been successfully treated by aspiration, using a needle and syringe^(19b,e).

Conclusion

In the words of Moser⁽¹²⁾, whose paper inspired this symposium, "all are diseases

that have appeared as the result of medical progress . . . at times this may be discouraging but it is never dull."

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Disease States Resulting From Miscellaneous Therapeutic Measures

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The group of miscellaneous iatrogenic diseases is so vast as to be beyond the scope of this paper, but certain ones merit special consideration. Among these are retrolental fibroplasia, homologous serum hepatitis, megaloblastic anemias following surgery, postmastectomy lymphangiosarcoma, secondary gout, and nephrosis.

Retrolental Fibroplasia

The rise and fall of retrolental fibroplasia is one of the most intriguing episodes in medical progress of our time. This form of blindness in infants was practically unknown until 1941, when it was described by Terry⁽²⁾ in this country. In less than a decade it became the leading cause of blindness in childhood. Causal factors were discovered, preventive measures taken, and the disease has now practically disappeared. It began in Sweden about 1944, in Australia about 1948, and in France, Switzerland, and England about 1951⁽³⁾.

Retrolental fibroplasia is a disease of premature infants, affecting chiefly those weighing 3 pounds or less at birth. The incidence increases with decreasing weight. Upwards of 22 per cent of infants weighing less than 3 pounds were affected⁽⁴⁾. There appears to be no racial difference in the incidence. The earliest stages of disease are noted at the age of 3-5 weeks⁽⁵⁾ by dilatation of the

arteries and veins of the retina, followed by edema and retinal hemorrhage. Abnormal capillary budding occurs in the nerve fiber layer of the retina, and is associated with an abnormal growth of the glial cells surrounding the budding capillaries. Small pre-retinal and vitreous hemorrhages occur, and capillary growth breaks through the limiting membrane of the retina and extends into the vitreous and over the retinal surface, accompanied by a delicate growth of fibroblasts which become more dense. Retinal detachment follows, and the retrolental membrane is formed by fusion of the detached retinal folds.

The cause of this tragedy was sought in congenital malformations, bleeding during pregnancy, angiomatous malformations, iron, water-soluble vitamins, and many other factors⁽⁶⁾. It was notable that the use of efficient incubators delivering up to 80 per cent oxygen saturation came into general use in the United States in about 1940, and their widespread use paralleled the development of RLF⁽⁷⁾. A similar development occurred in Sweden, England, Australia, and other countries, seemingly in association with the use of these high tension incubators⁽¹⁾. Ryan⁽⁸⁾ in Australia was perhaps the first to suggest the relationship to oxygen. Szewczyk⁽⁹⁾ noted the peculiar accentuation of the early stages of the disease after removing infants from the incubator, and a regression of the process upon returning them to a high-oxygen atmosphere. Others

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noted this seemingly paradoxical occurrence. Animal experiments by Patz and his co-workers⁽¹⁰⁾ and others demonstrated that there was a relationship to oxygen concentration and duration of exposure, as well as to the age of the infant. Patz and his group⁽¹¹⁾ obtained retinal changes in 71 of 76 eyes of rats exposed for 21 days in an atmosphere of 80 per cent oxygen, and 21 of 72 eyes in rats exposed for seven days. The mechanisms of this effect of oxygen upon the developing retina of premature infants has not been explained, but is apparently associated with alterations of essential enzyme systems of the retina⁽¹²⁾.

With realization of the probable causative effect of oxygen on the development of RLF, its use was decreased, and is now limited to severely ill or cyanotic infants. Concurrently with this practice, the incidence of RLF declined sharply in 1952 and 1953 in the hospitals of New York State, where statistics have been compiled to show this relationship⁽¹⁾. This statement is reflected in the great decrease in the number of papers on the subject to be found in the literature on pediatrics and ophthalmology since that time.

Viral Hepatitis

The widespread use and abuse of human blood and its derivatives have resulted in the transfer of the viruses of infectious hepatitis and homologous serum jaundice into large numbers of susceptible individuals. Jaundice of this type is common enough to be well known, and the danger of transfusion is well appreciated. The carrier problem in hepatitis has received less attention, but it deserves serious consideration. Stokes and his co-workers⁽¹³⁾ have shown that one individual with homologous serum jaundice remained infective for at least five years. Others have demonstrated infectivity in nonicteric patients for more than two years⁽¹⁴⁾. Murray⁽¹⁵⁾ has estimated that from 0.3 to 0.5 per cent of patients who receive blood will have hepatitis. Approximately 50 per cent of the patients who receive the icterogenic material will have the disease, and some 12 per cent of these remain anicteric. The infectious dose is extremely small, in the range of 10 by 10 by 6 cubic milliliters.

Infection may be transmitted by needles that have been improperly sterilized and

contaminated by either of the viruses. Transfer of infection by dental instruments has received little attention, but it is an excellent opportunity for the inoculation of either virus. Foley and Gutheim⁽¹⁶⁾ studied 50 patients with hepatitis and found that 15 had received local anesthetic injections for removal of teeth in one to six months preceding onset. This was seven times as high as the rate of dental extractions in a control group of nonicteric patients. Changes in sterilization procedures were recommended. So far there has been no evidence that any of the commonly used antiseptics can inactivate the viruses. Effective sterilizing procedures include autoclaving at 15 pounds of pressure for 20 minutes, boiling for 30 minutes, or dry heat at 180 C. for one hour.

Other forms of hepatitis resulting from toxic drugs and chemicals are noted frequently. Para-aminosalicylic acid⁽¹⁷⁾ used in the treatment of tuberculosis may result in a severe hypersensitivity reaction, with laboratory evidence of toxic hepatitis occurring in three to seven days.

Sulfonamides, arsphenamines, and a host of other therapeutic agents are known to be hepatotoxic in some cases. Their consideration has been included in other papers of this symposium.

Megaloblastic Anemia and Iron Deficiency Anemia Following Total Gastric Resection

Anemias of this type, though uncommon, represent a consequence of surgical therapy which is amenable to simple medical remedies, since response to parenteral vitamin B₁₂ and to folic acid is normal.

Frequency in reported series ranges from 25 to 60 per cent in patients with total gastrectomy who have lived from three months to seven years⁽¹⁸⁾. Total gastrectomy is usually done for gastric carcinoma, and many patients live only a short while, a fact which would preclude the development of many cases of macrocytic anemia, since stores of vitamin B₁₂ are sufficient to prevent anemia for an estimated four years⁽¹⁹⁾. Megaloblastic anemia in these patients is a slowly developing process which goes through several stages. Paulson and Harvey⁽²⁰⁾ have pointed out that at first the anemia is one of iron deficiency due to blood loss from the anastomotic site or an eroded esophagus. After about two years (six

months to seven years) macrocytosis develops and is followed by anemia in one to two years. Megaloblasts may be found in the marrow three to five years postoperatively, but temporal relationships vary widely. Combined system disease developed in only one of their 19 patients. They noted also that vitamin B₁₂ absorption was retarded in these patients, some 87 per cent of a 0.5 mcg. dose of orally administered B₁₂ labeled with cobalt⁶⁰ being recovered in the feces of one patient. Halsted, Gasster and Drenick⁽²¹⁾ further studied intestinal absorption of vitamin B₁₂ labeled with cobalt⁶⁰, and found that 11 normal persons excreted an average of 33 per cent of a 0.5 mcg. dose; 7 patients with pernicious anemia excreted 93 per cent of the same dosage, but excretion was reduced to 38 per cent when a source of intrinsic factor was administered along with the B₁₂. Eleven patients with total gastrectomy excreted 87 per cent of the 0.5 mcg. dose; excretion was reduced to 20 per cent when the intrinsic factor was provided. None of these patients had macrocytic anemia at the time. It seems, then, that the macrocytic anemias following gastric resection are dependent upon the failure of assimilation of vitamin B₁₂ due to a deficiency of the intrinsic factor. It has been recommended (Conley) that patients with total gastrectomy be treated as pernicious anemia patients from the beginning.

Macrocytic anemia has been reported following partial gastrectomy and gastroenterostomy in a relatively few patients. Here the intrinsic-factor-secreting portion of the gastric fundus is left intact. Intestinal anastomoses and strictures are sometimes associated with macrocytic anemias, as are gastro- and entero-colic fistulas. Such an anemia has been noted in patients with blind intestinal loops, possibly due to bacterial destruction of the vitamin B₁₂. This anemia can be prevented in rats by administering Aureomycin, and has been shown to respond to Aureomycin in human beings^(19,22).

Phenytoin sodium⁽²³⁾ has been incriminated in several instances as the cause of megaloblastic anemia in epileptic patients receiving this anticonvulsant therapy. Response to vitamin B₁₂ was poor, but the patients responded well to folic acid. The drug was thought to act as a mild folic acid antagonist.

Macrocytic anemias of severe degree are described in patients with hypothyroidism, though the anemia of this state is usually normocytic until the iron deficiency and hypochlorhydria have been corrected. Correction of the anemia by the administration of the appropriate hormone is usually accomplished slowly.

Postmastectomy Lymphangiosarcoma

This entity is included here because of the fact that the only acceptable cases thus far reported have followed radical mastectomy for carcinoma of the breast. The entity first made its appearance in the literature in 1948, when Stewart and Treves⁽²⁴⁾ reported 6 cases of malignant angiomatous neoplasia arising in the arms of patients who had had radical amputation for carcinoma of the breast, followed by prolonged lymphedema of the arm. The earliest appearance in reported cases has been five years after operation and the longest 22 years. A total of only 17 cases has now been reported⁽²⁵⁾, an indication of its rarity. One case reported by Matorell⁽²⁶⁾, in which an angiomatous neoplasm followed lymphatic edema of the leg of six months' duration, is not included in this group of cases.

The tumor has behaved in all reported cases as a highly malignant neoplasm which produced its fatal results by pulmonary metastases. One case of an eight-year survival following roentgen therapy has been reported by Southwick and Slaughter⁽²⁷⁾. Such therapy has not been uniformly successful, and most patients have undergone amputation, with generally poor results.

The tumor occurs superficial to the fascia as one or more painful dark nodules of the arm which enlarge and become more numerous as time goes on. They are composed of neoplastic vessels lined by actively proliferating endothelium. In the case illustrated here, previously reported by Marshall^(25b), the central vascular spaces more closely resembled mature hemangiomas, while the progressive periphery showed more evidence of neoplastic activity. In this case there were few vessels in any of the nodules which did not contain blood, and a very few which contained fluid resembling lymph. The tumor nodules were found along the deep vessels and nerves of the arm (fig. 1), but did not involve lymph nodes or



Fig. 1. Postmastectomy angiosarcoma. Each of the dark foci in the sections represents a focus of tumor.

bone at the time of shoulder-girdle amputation.

Further observation of the many patients who have had radical breast surgery will no doubt establish a few more cases of this type of tumor, which from all available evidence is a neoplastic process following upon logical cancer therapy.

Secondary Gout and Uric Acid Calculi

These conditions appear to be due to an acceleration in the degradation of nucleic acids and the flooding of the blood stream by intermediary purines and the end product, uric acid. Such readily available supplies of nucleic acids are found in those disease processes of the blood-forming organs in which cell growth and cell breakdown are particularly rapid. These diseases are primary and secondary polycythemia, chronic and acute leukemias, chronic hemolytic anemias in adults, pernicious anemia, and malignant lymphomas. Gout is very rarely associated with multiple myeloma or with chronic nephritis accompanied by uric acid retention⁽²⁸⁾. Sandberg, Cartwright and Wintrobe⁽²⁹⁾ have shown that uric acid excretion is greatly accelerated above its normal rate of 6.5 mg. per kilogram per 24 hours in the acute leukemias and in chronic granulocytic leukemia to from 13 to

30.3 mg. per kilogram per 24 hours. Following treatment with cortisone, 6-mercaptopurine or amethopterin, the urinary excretion of uric acid increased in acute leukemia as the leukocyte count decreased, and declined as the count approached normal. The excretion of xanthine and guanine paralleled that of uric acid. Overt secondary gout is not common.

Gutman⁽²⁸⁾ feels that the incidental occurrence of primary gout with the dyscrasias may occasionally occur, but he points out that the incidence of gouty arthritis has been reported to be from 5 to 9 per cent in polycythemia vera, with an increased incidence in females. No familial incidence is noted, and there is often a relationship of gout to radiation or chemotherapy. However, the precipitation of uric acid calculi in the urinary tract occurs more commonly than does gout. Response to therapy in acute gouty arthritis of the secondary type is said by Gutman to be essentially similar to the response seen in primary gout to those agents usually employed in therapy. He feels that there is probably a similar deleterious effect on both forms of the disease when urate retention occurs as a result of impaired renal function. There is no evidence of a characteristic renal defect in either primary or secondary gout.

The formation of uric acid stones occurs with moderate frequency in the above named conditions, and they are sometimes associated with urinary tract obstruction⁽³⁰⁾. By 1953 some 15 cases could be found in the literature. Weisberger and Persky⁽³¹⁾ reviewed 283 cases of lymphoma seen in the Cleveland Clinic and found an over-all incidence of 5.3 per cent associated with uric acid calculi, as opposed to none with metastatic carcinoma. They stated that uric acid stones were found in about 0.07 per cent of general hospital admissions. Thus the incidence of uric acid calculi in lymphoma and leukemia is some 75 times as great as one would expect in the general hospital population. Five of their patients had received no therapy for the lymphoma. The other 10 had received irradiation, P³², or nitrogen mustard. The use of ammonium chloride in cardiac failure precipitated uric acid calculi in 2 patients with lymphomas. They recommended alkalization of the urine and maintenance of high output, particularly in those patients receiving therapy.

Nephrosis

Factors essential to the development of tubular injury of the kidney are brought into play in many of the conditions discussed in this symposium. When one considers the mechanisms of toxic activity, hypersensitivity, circulatory collapse, arterial and arteriolar spasm, and necrosis of tissue, all which affect the tubules adversely, and when these factors are added and the mechanisms intermeshed, the probability of such injury becomes more evident. When one accepts the rather simple etiologic classification of tubular injury due fundamentally to: (a) nephrotoxic substances, and (b) ischemia, it becomes more surprising that more instances of acute renal failure due to tubular injury have not developed with the use of many substances and as a result of many of the procedures which have been discussed. The combination of several mechanisms for the production of cellular injury may co-exist; and where the tubule of the kidney is considered, this injury may be distinct and more or less specific. In many instances, however, there is an overlapping of mechanisms and of the injury produced. For example: The toxic injury of mercurial nephrosis is often

associated in the human with violent diarrhea, vomiting, dehydration, psychic episodes and vascular collapse, contributing the ischemic and shock factor to the toxic phase of the injury⁽³²⁾.

The work of Oliver and his colleagues⁽³²⁾ in demonstrating, by microdissection of nephrons, the random localization in the kidney and in individual nephrons in relation to the ischemic phase, and the more or less uniform diffuseness of the blood-borne toxic injury, has been a classic in this field. Mechanisms of injury by some specific substances, however, are not completely explained, and in this regard the nephrosis which follows infusions of hypertonic sucrose and of acacia⁽³³⁾ are points in illustration. It is of interest that vacuolar lesions develop in experimental animals after ligation of the ureter and the development of hydronephrosis when sucrose is employed; but the tubules are protected against injury from mercury or uranium nitrate. The formation of vacuoles in the rabbit kidney is not prevented by the administration of phloridzin, which normally blocks the absorption of both glucose and sucrose by the tubular epithelium. Tubular lesions could not be demonstrated in the aglomerular toad fish, which cannot secrete sucrose, after the intraperitoneal injection of sucrose⁽³⁴⁾. Allen⁽³⁵⁾ believes that the vacuoles are due to an osmotic effect produced by these substances acting outside the tubular cell, most likely the tubular lumen or the peritubular capillaries. The sucrose effect is generally greater than that of an equal concentration of glucose, but changes are also found when acacia or intravenous gelatin is used. Xylose, inulin, creatinine, and urea seem to act in a similar manner.

Many substances commonly used therapeutically have produced the nephrotic syndrome, or an anatomically demonstrated tubular injury, with or without hepatic injury. These substances include phenylbutazone⁽³⁶⁾, phenylacetylurea (Phenurone)⁽³⁷⁾, paramethadione (Paradione)⁽³⁸⁾, trimethadione (Tridione)⁽³⁹⁾, the chelating agent, sodium ethylene diamine tetra-acetate (Sodium EDTA)⁽⁴⁰⁾ and phenobarbital⁽⁴¹⁾. This list will no doubt increase as the toxicity of future therapeutic agents is found to develop.

Other Disorders

We should also include in this discussion the controversial problem of hemochromatosis and its relation to multiple transfusions⁽⁴²⁾; disease states following irradiation therapy; osteoporosis following ovariectomy; and prolonged bed rest resulting in renal calculi; encephalitis and similar states following the use of anti-rabies vaccine; hypersensitivity states induced by tetanus antitoxins and the administration of other foreign sera; fetal malformations induced by the use of folic acid antagonists; neurologic changes induced and allowed to develop in pernicious anemia patients by the use of "shotgun" vitamin preparations; and infections of the urinary tract brought about by cystoscopic manipulation.

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Leprosy in North Carolina

Report of a Case in a World War II Veteran

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DURHAM

Leprosy is a rare disease in the continental United States, except in Florida, Louisiana, and Texas where it is endemic, and in California and New York where cases in foreign-born patients are observed⁽¹⁾. Four cases have been reported to the North Carolina State Board of Health since 1918⁽²⁾: 1 from Salisbury, Rowan County, in 1951; 1 from Gastonia, Gaston County, in 1953, and 2 (in 1945 and 1954, respectively) from the United States Army post at Fort Bragg in soldiers who were believed to have become infected in the Philippines.

Leprosy acquired during military service in World War II has been reported in 7 American veterans. Porritt and Olsen⁽³⁾ reported 2 cases in members of the same unit in the United States Marine Corps, who had been tattooed successively by the same man in Melbourne, Australia, on the same day in June, 1943, and in whom tuberculoid leprosy

developed in the tattooed sites approximately two and one-half years later. Doull⁽⁴⁾ reported 3 patients with tuberculoid leprosy who were admitted to the National Leprosarium in Carville, Louisiana, all of whom were from non-endemic areas and had served in endemic areas during World War II. Levan⁽⁵⁾ reported a case of early lepromatous or indeterminate leprosy in a man who was stationed in New Guinea and the Philippines for 18 months in 1944-1945. However, because the onset of disease occurred 18 months after the earliest suspected exposure, longer than the usual period of incubation, Sloan⁽⁶⁾ doubted that this patient was actually infected during military service in an endemic area. More recently Perrin and Caplin⁽⁷⁾ have reported a case of lepromatous leprosy in a Navy veteran seven years after he had had direct contact with leprosy patients in the Philippines in 1943-1945.

The following case is the eighth reported case of leprosy acquired during military service in World War II by an American veteran, and the fifth case of leprosy reported in North Carolina.

From the Division of Dermatology and Syphilology, Department of Medicine, Duke University School of Medicine, Durham, North Carolina (Drs. Smith, Wansker, and Olansky), the Dodson Emergency Hospital, Dobson, North Carolina (Dr. McLaurin), and the Medical Service, Veterans Administration Hospital, Durham, North Carolina.

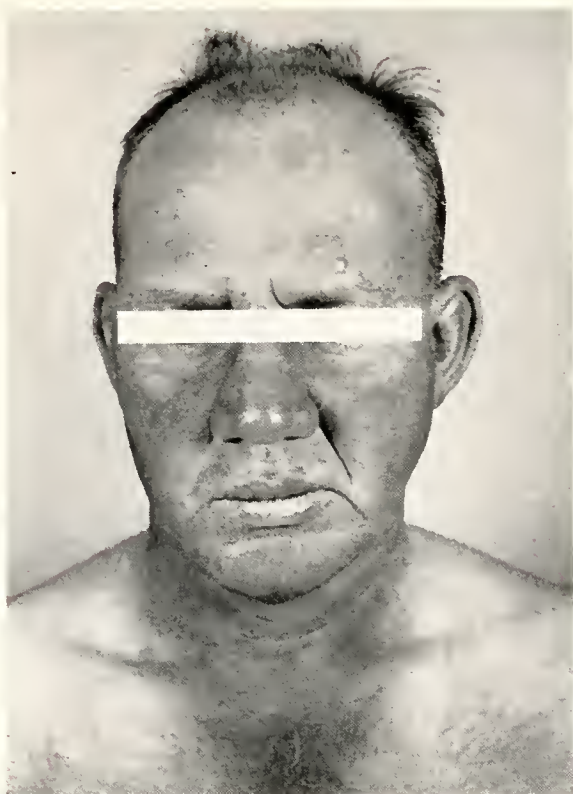


Fig. 1. Lepromatous nodular lesions above the left eye and thickened skin over malar regions present but not striking.



Fig. 2. Scarring over right knee following trauma in an anesthetic area and macular pigmentation over the shins.

Case Report

A 32 year old white man was admitted to Veterans Administration Hospital, Durham, North Carolina, on May 12, 1955, and was discharged on May 31, 1955.

Present illness

The patient first observed numbness over his right knee in 1947. Twelve months later he noted that similar numb areas had developed over his legs, arms, and abdomen. In 1951 an orange-brown eruption appeared on his abdomen. The abdominal lesions subsided within six months, leaving small pigmented areas.

On November 22, 1951, he was seen by one of us (D. A. McL.) because of the numb areas and blisters over his knees. A neurosurgeon saw him in consultation, but was unable to make a specific diagnosis and advised close follow-up for the detection of any progression of the process.

During 1952 the patient noted small "bumps" over his arms and legs and slight thickening of the skin of his face. He continued to have numbness of the extremities

and blisters over his knees. He also noted an increasing "splotchy" pigmentation over his legs.

In May, 1952, he again was seen by one of us (D. A. McL.), at which time he presented an erythematous multiforme-like eruption. This eruption persisted, and in March, 1953, he was seen in consultation by a dermatologist who suggested erythema multiforme as the most probable diagnosis, but also considered lupus erythematosus and Boeck's sarcoid. He recommended a biopsy, but the patient did not return for this procedure.

In the latter part of 1954, progressive nasal stuffiness, with persistence of mild nasal obstruction, developed in the patient.

On May 7, 1955, the patient again consulted one of us (D. A. McL.). At this time he presented non-healing lesions on the chin, thickened skin over the face and hands, areas of anesthesia, and a suggestively leonine-like facies. Skin scrapings were obtained and revealed many acid-fast organisms. A diagnosis of leprosy was made and the patient was



Fig. 3. Fite stain of skin lesion from abdomen X's 410. Globi of *M. leprae* organisms in upper dermis.

referred to the North Carolina Baptist Hospital in Winston-Salem. From there he was referred to the Veterans Administration Hospital, Durham, North Carolina.

Throughout his illness, the patient felt quite well and had no systemic symptoms. He continued to work.

Past history

The patient had never lived outside of North Carolina until his service in the Army during World War II, at which time he spent approximately 12 months in the Philippine Islands in 1943 and 1944. While in the Philippines he lived in native houses, but stated that he had no direct contact with the natives themselves. He had not been tattooed while in the South Pacific.

The past history and family history were otherwise non-contributory.

Physical examination

Examination of the skin revealed small areas of brownish pigmentation in a confluent distribution over the trunk and legs. There were small papules, measuring 0.5

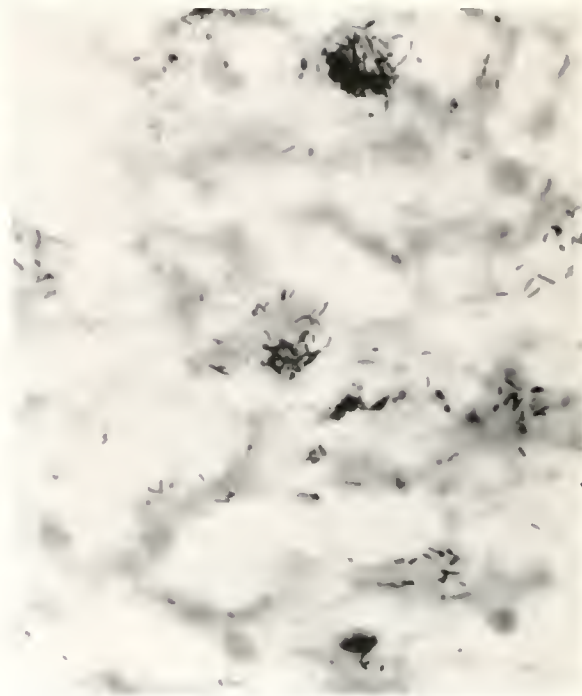


Fig. 4. Fite stain of skin lesion from abdomen, oil immersion X's 1788. Clear spaces and groups of *M. leprae* organisms in dermis.

cm. in diameter, over the abdomen and face. The face had an orange-brown hue and slight induration of the cheeks. There was bilateral conjunctival injection. There was almost complete obstruction of the right side of the nose, with a yellowish exudate over the superior turbinate. Neurologic examination revealed patchy areas of anesthesia which, in general, coincided with the areas of pigmentation.

Accessory clinical findings

The serologic test for syphilis was negative. The hemogram was normal. Urine and stool examinations were negative. The fasting blood sugar was 95 mg. per 100 milliliters, the non-protein nitrogen 41 mg. per 100 milliliters, alkaline phosphatase 0.9 Bodanski units, bilirubin 0.95 mg. per 100 milliliters, total protein 7.8 Gm. per 100 milliliters, with albumin 5.2 Gm. per 100 milliliters and globulin 2.6 Gm. per 100 milliliters. Serum, calcium, phosphorus, and cholesterol determinations were normal. Roentgenograms of the spine, chest, sinuses, and distal extremities were normal.

Smears made from scrapings of skin and conjunctivae showed many acid fast organisms in Kinyoun's stain, as did scrapings of

the nasal mucous membranes. Histologic examination of a nodular lesion from the abdomen was consistent with the diagnosis of lepromatous leprosy, and a Fite stain revealed many acid fast organisms.

Course in hospital

While hospitalized, the patient was completely asymptomatic and the diagnosis of lepromatous leprosy was confirmed. On May 22, 1955, 0.1 milliliter of lepromin was injected intradermally. This test was read after three weeks as negative. On May 31, 1955 the patient was transferred to the United States Public Health Service Hospital in Carville, Louisiana, where he showed satisfactory clinical improvement on January 19, 1956. All skin scrapings have continued to show large numbers of *Mycobacterium leprae*.

Comment

Leprosy is a non-endemic and rare disease in North Carolina, this being the fifth case reported in the state. This patient had no known contacts with leprosy prior to his military service, having always lived in a non-endemic area. Although not closely associated with natives, he was quartered in native houses in the Philippines for approximately a year in 1943-1944. The incubation period of three years is somewhat short, but not inconsistent with the view that he acquired leprosy in the Philippines while in military service.

Relatively few cases of leprosy have been acquired by American veterans during military service since 1940; however, because of

the long incubation period characteristic of leprosy, an appreciable number of cases may be observed during the next 20 years in veterans who have served in endemic areas⁽⁸⁾. In a non-endemic area, therefore, the combination of skin lesions, such as pigmented macules, nodules, and erythema multiforme or erythema nodosum, associated with anesthesia or thickening of the nerves should suggest the diagnosis⁽⁹⁾. Skin scrapings of lesions and nasal mucosa for acid-fast bacilli and histologic studies of tissue from involved areas should then be carried out to establish the diagnosis.

Summary

A case of leprosy acquired by a native of North Carolina during military service in World War II is reported. The combination of skin and neurological lesions should always suggest the diagnosis of leprosy.

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The physician in any community large or small who spends time and energy helping the new doctor in town get started toward a successful and ethical practice is contributing greatly to both his community and his profession. Nothing gives a young doctor more pride and confidence than a helping hand or a pat on the back from a would-be competitor who is better established in that particular community. The practice of medicine is a cooperative enterprise with one great function. That function is to give to the people the very best medical care at the lowest possible cost. Only by helping those who follow us can such a policy continue to succeed. Denton Kerr: Am I My Brother's Keeper? (President's Page) Texas State J. Med. 53:512 (July) 1957.

The Society's Program on Professional Liability Insurance

DON C. HAWKINS*

ST. PAUL, MINNESOTA

During the past several years many changes have focused the attention of both the physician and the insurance industry on the problem of the professional liability claim. The increase in the number of and extravagant amounts of claims have been extremely alarming.

It has been pointed out many times that the majority of claims are not well founded, and that the final experience on pending claims has yet to be determined. Whether or not the experience is finally favorable depends entirely on the interest in and active support of preventive programs initiated by both doctors and insurance company representatives.

The cost of insurance also will be determined by exactly those same factors. The maxim, "An ounce of prevention is worth a pound of cure," to my way of thinking, has special application in this instance; and yet, how can physicians prevent the calamity of a malpractice suit if they are in no way informed of the principles which govern their conduct in the treatment of patients? There are certain well defined principles which should not only be known, but felt, and they should become a part of the equipment for the work to be performed.

There is no better way to avoid the mistakes and errors that have caused other members trouble and expense. It is well known that human beings ordinarily are responsible for their own careless actions; they are also responsible for the negligence of their agents and employees. It should be understood that, under our Constitution, questions of fact in civil cases are usually tried by a jury, which as a general rule is composed of individuals lacking in scientific knowledge. This fact in itself should underscore the necessity of exercising a degree of care that will appeal to the layman as being reasonable. The rules of law gov-

erning those cases are not statutory, nor are they local. They are principles of common law applicable and enforceable in every state in the Union.

Factors Contributing to the Increase in Claims

I do not believe that each doctor has to be faced with a suit to see the light of day. The growing evidence is plain enough already. Professional liability insurance rates have been increasing and the number of insurance carriers is diminishing for no other reason than that they are losing money. Those who have given any thought to the problem know that the control of claims is largely a matter of public relations, as well as meticulous care in treatment of the patient. Impersonal, production-line efficiency does not appeal to the average patient. His pain is personal, and he wants to tell the doctor and not have his history taken by a strange receptionist, no matter how attractive she may be.

One important cause of increasing claims is the changing attitude on the part of the courts toward charitable institutions. Whether this attitude is socially desirable is a broad question involving many factors. The important thing to the medical profession is that the change of attitude is already an established fact.

Another important element in the increasing losses through civil suits is the growth of racketeering in damage claims, and in less extreme cases the development of a tendency to use damage claims as a method of avoiding payment of medical expense. About 10 years ago there was organized a group of lawyers known as the National Association of Claimants Attorneys. This Association wishes to convey the impression that they operate as a public service agency. Their wish to convey this impression is laudable, but when we reckon with the services performed, we must take into account a record in the courts which is second to none in history. Verdicts of

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shocking proportions are being handed down by juries today. Is this in the public interest? Is an organized attempt to employ every trick in the legal book to gain ever increasing judgments a public service?

As organized, this group was limited to lawyers helping the injured workers. Its interest has been extended, however, to include bodily injury cases involving anyone, arising out of any accident, regardless of where or how it occurred. Who will benefit by this activity? Certainly not the insurance companies, although the continuation of excessive court awards will force many people to purchase insurance in self-defense. It will also raise rates to a degree that other people who need insurance will not be able to buy it. The general public will not benefit. Although the attorneys have chalked up a record for high awards to claimants, we must consider that frequently the attorney fees amount to 40 per cent of the award. Simple arithmetic tells us that before a claimant can profit under these circumstances, awards must be $166 \frac{2}{3}$ of what would normally be received. The only real beneficiaries are the member attorneys. As long as their fees are $33 \frac{1}{3}$ to 40 per cent of the take, they will continue to receive amounts almost as great as the claimants they propose to help, while sustaining no injuries and suffering no pain themselves. It seems to me that it would be wise for them to clean their own house before correction comes about by an aroused public, legislative enactment, or both.

Another reason for the increase in claims being brought against physicians is that insurance companies have too often been willing to settle unjustified claims out of court for their nuisance value. Settlement of an unjustified claim out of court is the greatest possible encouragement for other people with perverted morals to try to do the same.

Origin and Development of the Society's Plan

More than a year ago the Insurance Committee of your State Medical Society, having all this information and much more than I have been able to give you in a few minutes, went to work on the problem in the State of North Carolina. They made studies and met with other state committees, the Committee of the American Medi-

cal Association in Chicago, and other individuals. We were called in to discuss some of the problems that we have found in many states in the Union, and they developed a program, and in case you do not know who "we" are, I am referring to the St. Paul Fire and Marine Insurance Company who spent many years in the insurance business. We are 105 years old. We have been writing this class of business for more years than I want to tell you, and I have been personally interested in the problem longer than I want to say.

However, your House of Delegates in the last year approved the program developed by that Committee, the objectives of which were and are to obtain for the members of the North Carolina Medical Society the broadest form of coverage obtainable, irrespective of the nature of the practice; to provide a vigorous defense of unwarranted claims, and to judiciously handle those where investigation showed that negligence and error exist.

The attorneys selected for the defense would be those that would be mutually satisfactory to the individual doctor and the Society and the Company. In case you don't know it, a different type of lawyer is needed to handle the defense of a malpractice case. It is not similar to the property damage or automobile business. It takes a specialist in this business. The experience, in addition, has to be submitted to the Insurance Department, because we are a very highly regulated industry. The Insurance Departments approve the rates, and we must prove that what we charge for the insurance is fair; and when we effect a reduction, by the same token, we must follow the same procedure. We have been fortunate in the last three years to reduce the rates straight across the board in about four states. Another objective of the program is to prevent, if possible, an increase in liability rates and to work toward a reduction in cost based upon the loss of experience. The combined services of the company and the cooperation of the membership will contribute materially toward the achievement of this goal.

How it works

The policies are written on an individual basis, in keeping with the established policy of the St. Paul Fire and Marine Insurance

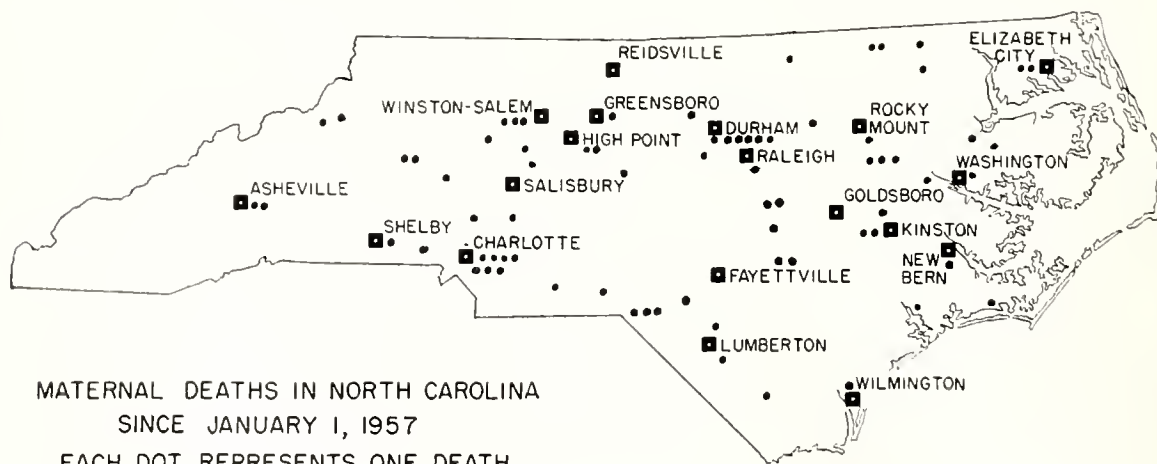
Company and the St. Paul Mercury Insurance Company. In the interest of good public relations, the contracts of insurance will be produced and written through local agents of the company where the doctors reside. That agent is also interested in your welfare, and may possibly be your neighbor, your patient, or both. He pays his taxes and supports the schools, the churches, and every other community enterprise.

The adoption of such a program involves no discrimination against or condemnation of other programs or companies. There is no requirement as to a fixed per cent of the membership that must insure under the program. It is entirely voluntary.

The greater the participation, however, the greater will be the benefits. You have already had mailed to your offices the gen-

eral information. Many of you have already joined the plan. In July, it will be one year old. The mechanics have been set up. There are wrinkles to straighten out occasionally, but I know of no better way to settle the problem than on a local basis in person, rather than from some far-off point by mail.

It is our desire to work with you as closely as possible, and we will welcome any suggestion or criticism as the program progresses. We deeply appreciate the assistance of Jim Barnes, with whom I have been personally acquainted for many years, and his staff; and the very close advice and cooperation of the Insurance Committee, consisting of Dr. Geddie, Dr. Papineau, and Dr. Paschal, the chairman; Dr. Baker, Dr. Murphy, and others too numerous to mention.



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"The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration. Whoever chooses this profession assumes the obligation to conduct himself in accord with its ideals"—Principles of Medical Ethics of the American Medical Association, Chapter 1, Section 1.

SEPTEMBER, 1957

ASIAN INFLUENZA

One of man's more outrageous fortunes through the years has been to keep alive in the face of overwhelming and hardly understood epidemics. In medieval times, when infectious explosions were attributed to dire astrological influences or evil spirits of incomparable virulence, anxiety and demoralization aggravated already stricken peoples. Through centuries plague, yellow fever, cholera, smallpox, and perhaps leprosy and lues even brought sovereign nations to heel and made prophecies of doom distressingly accurate.

The influenza epidemics expected this fall and winter should remind us that, despite our frequent cries for "the good old days," we aren't too bad off. Since the first mut-

terings of a young pandemic in China in January of this year, the responsible agent has been identified, a specific vaccine prepared, and a comprehensive program to inform the public inaugurated. Six manufacturers are producing vaccine, and thus far the unfortunate politicomedical atmosphere which surrounded the poliomyelitis vaccine program seems to have been suppressed.

The epidemic is caused by a new variant of Group A influenza virus, and as a consequence no one has acquired immunity and available polyvalent vaccines provide no protection. Thus if we were not forearmed, a potentially dangerous situation would lie before us, for the unexposed are particularly vulnerable; childhood diseases, mild in this country, have overwhelmed the previously unexposed Pacific Islanders. The vaccine in preparation is a monovalent preparation of killed virus cultivated from embryonated egg and is effective only against the new variant.

The clinical syndrome of this infection is, like previous influenzal conditions, classically nonspecific: *h e a d a c h e*, myalgia, cough, sore throat, rhinorrhea, chills, fever, malaise, all lasting for from three to five days without rash, adenopathy, or hepatosplenomegaly. Adenovirus infections, common colds, viral pneumonitides, and salmonellosis may confuse the clinician in isolated cases, but the total incidence and the general awareness of "la grippe" among both laymen and physicians should make diagnosis relatively easy.

Treatment as in all viral conditions except those of the lymphogranuloma-psittosis group is supportive—*aspirin*, *codeine*, rest, adequate diet, and so forth. In the 1918 epidemic mortality was partly attributable to secondary bacterial organisms such as *cocci* or *Hemophilus influenzae*. Because antibiotics are now available, it may be suggested that these agents be employed routinely; this suggestion actually may be a dangerous one. We have learned that the indiscriminate use of antibiotics so upsets normal floral balance that super-infection may make prophylaxis tragedy. Antibiotics, then, should not be used except when definite bacterial complications develop. Since the staphylococci are showing signs of taking over hospitals, victims may be better off at home. When bacterial complications develop, penicillin is the drug of choice since

pneumococci and streptococci will probably be the major offending organisms. (Interestingly, one drug manufacturer with a booming business in broad-spectrum antibiotics recommends broad spectrum antibiotics; another which sells penicillin but has no broad spectrum agent on the market espouses penicillin. Independent data favor penicillin.)

It is anticipated that enough vaccine will be available for more valuable and vulnerable segments of the population—particularly the very young and the very old. For those not so classified:

1. Do not be offended because you aren't that valuable; be happy you aren't that vulnerable.

2. Avoid crowds.

3. Be sensible and avoid excesses.

For those who are sensitive to chicken and egg products and cannot be vaccinated, the same be said.

In an era popularly referred to as "the age of anxiety," it should be comforting to know that the mortality rate to date is in the range of less than 1 per cent, and this in Asiatic countries without particularly effective public health programs or available vaccines.

* * *

THE FOREIGN DOCTOR CONTROVERSY

During World War II the State Board of Medical Examiners agreed to grant limited licenses to foreign doctors working in our state hospitals for mental disease and tuberculosis. This was done to meet an emergency—a temporary shortage of doctors caused by the demands of our government for medical men. Since this shortage no longer exists, the Board of Examiners decided in its June meeting not to renew the temporary licenses after July 1, 1958.

The announcement touched off a strong protest from the State Hospitals Board of Control and the directors of the state hospitals for tuberculosis. They claimed that it would be impossible to replace the foreign doctors by fully licensed physicians with the present salary scale. Many newspapers joined the attack on the Board of Examiners. It was even proposed that a special session of the Legislature be called to revise the Medical Practice Act in order to license foreign doctors.

Fortunately a compromise was reached at a joint meeting of the Board of Control and of the Board of Examiners. The foreign doctors are given three more years to obtain full licenses. Those who cannot qualify within that time will not be allowed to continue to practice in the state.

This compromise seems to have met general approval. The *Charlotte Observer* and the *Winston-Salem Journal and Sentinel*, for example, each devoted a leading editorial to the subject, with almost similar headings: The *Observer*, "Compromise at its Finest;" the *Journal and Sentinel*, "Reasonable Compromise."

The controversy has accomplished at least one good thing: it has made the people of North Carolina realize how much they owe the Board of Medical Examiners for maintaining high standards of medical practice in the state. The *Journal and Sentinel* well said:

Although it has made concessions in agreeing to this compromise, the examining board has neither lost prestige nor its case for the maintenance of proper training standards for doctors practicing in the state. It has not lowered the standards; it has merely granted a group of doctors, limited strictly to institutional practice, a longer period of time in which to meet those standards. This it has done to help meet the continuing emergency in the understaffed mental hospitals.

* * *

PREVENTIVE GERIATRICS: PANEL DISCUSSION

The *Journal of the Michigan State Medical Society* devotes its May issue to a second panel discussion of Preventive Geriatrics. (The first panel was given three years before, in the May, 1954, issue.) The panel "was conducted by mail between the members of the committee and outstanding authorities in their respective fields."

A more pertinent topic for discussion could not have been chosen:

"Importance of Good Nutrition and Exercise in the Aged." Telling arguments for the necessity of regular exercise were presented by various members of the panel. A very practical illustration was cited by Dr. Laurence E. Morehouse, of the University of California, who had

learned that young management executives in conference felt that the lack of physical fitness handicapped them in their deal with

labor. They admitted that lack of stamina worked against them in long and grueling bargaining sessions with labor leaders."

Dr. Ernest D. Michael, of Santa Barbara College, University of California, "quotes a number of authorities to indicate that physical activity has a beneficial effect on the autonomic nervous system in relation to the rest of the body."

Many have learned from experience that after a hard day in the office a brisk walk is usually more relaxing than the same time spent lying on a couch.

Very appropriately, proper nutrition is discussed, and the danger of overnutrition stressed. Dr. C. H. McCloy, of the State University of Iowa, offered the excellent suggestion that "perhaps the A.M.A. should produce a relatively small and specific manual on nutrition, which might be used by the average physician as a 'Nutrition Formula'."

Dr. Jean Mayer, of the Harvard School of Public Health, summarizes the whole discussion in three rules for retarding senescence:

1. Eat a varied diet to avoid any chance of nutritional deficiency.
2. Do not eat too much of it so as to maintain the same weight that you had at twenty-five, and
3. Continue to exercise regularly no matter how busy a schedule you have.

* * *

DR. F. J. L. BLASINGAME TO BE GENERAL MANAGER OF THE AMERICAN MEDICAL ASSOCIATION

In his Secretary's Letter of July 30, Dr. George Lull announced that on January 1, 1958, he will relinquish the position of General Manager of the American Medical Association and take on the newly created job of assistant to the president of the Association. He will, however, continue to serve as secretary of the Association until the June meeting of the House of Delegates.

Dr. F. J. L. Blasingame, of Wharton, Texas, has been appointed by the Board of Trustees to succeed Dr. Lull as general manager, effective January 1.

It is hard to think of the American Medical Association without thinking of George Lull. His personal magnetism, his infinite capacity for friendship, and his native ability made it possible for the transition from

his beloved predecessor, Olin West, to be made so smoothly as to be almost imperceptible.

George has been such a welcome visitor to the annual meetings of our State Society that it is good to have him say in a personal letter to one of our Society officials, "I certainly will continue to come to the North Carolina meetings just as long as I possibly can."

His successor, Dr. Blasingame, made many friends when he came as a guest speaker to our Society in Asheville. He is well qualified for the position, having served for eight years as a member of the Board of Trustees. He was vice chairman of the Board and chairman of the Executive Committee when elected as general manager. Dr. Lull says of him that "he has the leadership, knowledge, imagination and experience that will assure effective administration of the affairs of the Association."

This JOURNAL extends best wishes to both Dr. Lull and Dr. Blasingame, and congratulations to Dr. David Allman, president of the A.M.A., and Dr. Gunnar Gundersen, president-elect, for having such a capable assistant as Dr. Lull.

* * *

DUKE'S GRANT FOR RESEARCH ON AGING

A significant event in the history of Duke University and of North Carolina took place on July 31, when Dr. Leroy Burney, Surgeon-General of the U. S. Public Health Service, came to Duke to present formally from the USPHS a grant of \$1,500,000 to be used over a five-year period—\$300,000 a year—for a regional research center on aging. This will be the first of its kind in the United States—so that North Carolina is destined to be used once more for a pilot study. The selection of Duke for this magnificent grant is a tribute to Dr. Ewald Busse and his fellow workers, who have been conducting on a comparatively modest scale research on the aging process. The additional funds supplied by the grant will enable them to expand greatly their work, so that Duke will indeed be a regional research center. Not only Duke, but all North Carolina and surrounding states will profit by the grant.

Hearty congratulations to Dr. Busse and his co-workers for this signal recognition.

President's Message

THE PHYSICAL FITNESS OF AMERICAN YOUTH

Our attention has recently been focused on figures which tend to show that the physical fitness of American youth is not what it should be. This matter has been precipitated by the announcement that nearly 60 per cent of American children failed the Krause-Weber test, while only about 8 per cent of foreign children could not pass it. This test consists of several exercises designed to evaluate physical fitness in terms of strength and agility involving chiefly the skeletal muscular and osseous systems.

It has been pointed out that our children, though better fed, clothed and housed than those of any other nation, have become soft by inactivity. In this age of mechanization they are not called upon to put forth enough physical effort. There is no wood to be cut and brought in, and very few chores to be performed. Children are driven to school in buses or family cars and are forbidden to walk because of the danger on the highways. Suburban areas have become so heavily populated that there are few woods and fields for them to play in. Furthermore, running errands has largely been replaced by the telephone, and children spend leisure time watching television and going to the movies instead of participating in active sports. On the other hand, our children are taller and weigh more than those of previous generations.

It seems likely also that European children are better developed as individuals because in most foreign countries the emphasis is on physical exercise for the masses rather than on competitive sports as is the case in our country. In our schools and colleges there is often little attention paid to those who do not go out for one of the major sports or who do not make the teams. The interest is centered in a certain select few, and the remaining boys and girls are largely ignored. Perhaps this is one reason why in recent years foreign contestants have fared better in the Olympic games than have our participants. Their countries probably provide better physical training for large numbers during the formative years.

Our military leaders are not alarmed over this situation, as it has been demonstrated that our recruits have responded well when put through a training program and our soldiers have proved equal to any, and superior to most, in combat. Furthermore, it has been shown that a large number of those who failed the Krause-Weber test could pass if given a brief course in training in muscular development. To my mind, our gravest problem is not one of failure in muscular development, but lies in our large number of rejectees for military service because of organic diseases such as rheumatic heart disease, tuberculosis and diabetes, or poor vision and dental caries.

That better physical training is desirable no one can deny. In addition to the benefits accrued from a better physical state, wholesome diversion for our young people should go a long way toward the prevention of juvenile delinquency. Would not a well rounded physical development program be a sounder investment than the establishing of drag racing strips as an outlet for energetic youths?

A step in the right direction was made when President Eisenhower appointed the Council on Youth Fitness, a measure which was discussed in detail in the *U. S. News and World Report* on August 2, 1957. Some compelling facts which were brought to light and reported in this article are as follows.

1. Organized leagues for sports competition afford opportunity for less than 10 per cent of our youth.
2. More than 90 per cent of our elementary schools have no gymnasiums.
3. Less than 50 per cent of our high schools give physical education programs, and those that do are frequently inadequate.
4. Less than 5 per cent of our youth can enjoy camping and outdoor living.
5. Forty per cent of our young men entering service during World War II could not swim 50 feet.

It is hoped that the efforts of this Council will inspire better attention to the physical development and welfare of American youth at the home and school levels.

EDWARD W. SCHOENHEIT, M.D.

CORRESPONDENCE

DR. ROBERT P. NOBLE—PIONEER
RADIOLOGIST

To the Editor:

I have recently received a gracious letter from Dr. Robert P. Noble, Professional Building, Raleigh, calling attention to an error in my paper on "Radiology in North Carolina—1896-1916." The error lies in my statement that, "I do not know of any radiologist today who was practicing in the State before 1917, including the members of the North Carolina Radiological Society." Dr. Noble informed me that he "came to Raleigh on Monday the 3rd. day of January 1916 and opened my office in the Old Rex Hospital for the practice of x-ray."

I am greatly embarrassed over this mistake, for I knew of the accomplishments and lengthy tenure of Dr. Noble, who has been one of the outstanding radiologists in our state for many years. I had talked over my interest in the early history of radiology with him, received some valuable information, but evidently made an error in my notes on the date of his return to Raleigh, after excellent training in our specialty with Dr. Henry K. Pancoast of Philadelphia. I planned in covering the next twenty year period to mention particularly Dr. Noble and Dr. R. L. Lafferty along with a few others.

I hope that you will find it possible to print this letter in an attempt to rectify my injustice to Dr. Noble.

Very truly yours,

William H. Sprunt, III, M.D.

Humanity has its well-established moral code on which human relations are based. It is these morals law that enable man to live in a society, and the problem is whether these morals apply only to the individual or also to groups of men, whether crimes which are punished by death in one country should be suffered to be practiced on a big scale as a routine by governments in another country, —being "internal affairs." This is more than an ethical problem. As a society could not exist without a moral convention among its members, so countries cannot exist, side by side in peace, without a moral code. I am deeply convinced that this is the simple root of all our political troubles, the whole political superstructure being a pseudo-problem."—Albert Szent-Gyorgyi, *Science, Ethics, and Politics*, Science 125:225 (Feb. 8) 1957.

BULLETIN BOARD

COMING MEETINGS

University of North Carolina Postgraduate Medical Symposium—Chapel Hill, November 21-22.

A.M.A. Study Conference on Rural Health—Purdue University, Lafayette, Indiana, October 4-5.

A.M.A. Council on Foods and Nutrition, "Symposium on Nutrition in Pregnancy"—University of Missouri Medical Center, Columbia, Missouri, October 11.

Academy of Psychosomatic Medicine, Fourth Annual Meeting—Morrison Hotel, Chicago, October 17-19.

American Rhinologic Society, Third Annual Meeting — The Palmer House, Chicago, October 18-19. The meeting will be followed by a three-day clinical session at the Illinois Masonic Hospital, Chicago.

American College of Gastroenterology, Twenty-second Annual Convention—The Somerset, Boston, Massachusetts, October 21-23.

National Safety Congress (Program on Vision in Industry)—Congress Hotel, Chicago, October 24.

Southeastern Allergy Association, Annual Meeting—Fort Sumter, Charleston, South Carolina, November 1-2.

A.M.A., Eleventh Annual Clinical Meeting—Convention Hall, Philadelphia, December 3-6.

American Association for the Advancement of Science, One Hundred Twenty-fourth Annual Meeting—Indianapolis, Indiana, December 28-29.

NORTH CAROLINA STATE BOARD OF MEDICAL EXAMINERS

The next meeting of the Board of Medical Examiners will be held at the Jefferson Hotel, Morehead City. Applicants for license by endorsement of credentials will be interviewed October 12, 1957.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

Dr. J. Logan Irvin has assumed the chairmanship of the Department of Biochemistry and Nutrition of the University of North Carolina School of Medicine. At the same time Dr. Irvin, who has been a member of the faculty since 1950, was promoted from associate professor to professor.

Dr. Irvin returned to the University last September after completing nine months of research at the National Institutes of Health at Bethesda, Maryland. This research on the biosynthesis of proteins and nucleic acids of normal liver and liver tumors was supported by a fellowship the Guggenheim Foundation.

The first postgraduate courses in medicine of the academic year offered by the University of North Carolina School of Medicine will begin in Morganton September 18 and Asheville September 19.

Co-sponsoring both courses is the UNC Extension Division. The Morganton course is co-sponsored by the Burke County Medical Society and the Asheville course is co-sponsored by the Buncombe County Medical Society.

This is the forty-first year that postgraduate medical instructions have been offered to North Carolina physicians by the UNC School of Medicine.

Both courses will consist of six days of lectures. Lectures will be given in the afternoons and evenings each Wednesday in Morganton and each Thursday in Asheville. There will be no lectures during the weeks of September 22 and October 13 because of District Medical Society meetings.

The lecturers for the two courses will be Dr. Leonard Palumbo, UNC School of Medicine; Dr. Milton S. Sacks, University of Maryland School of Medicine; Dr. W. A. Sodeman, Jefferson Medical College; Dr. W. W. Forrest, UNC School of Medicine; Dr. W. M. Kelsey, Bowman Gray School of Medicine; Dr. Benjamin Manchester, George Washington University School of Medicine and Dr. Erle Peacock of the UNC School of Medicine.

* * *

The University of North Carolina School of Nursing has been notified that it is the recipient of a federal grant from the U. S. Public Health Service to be used in support of its undergraduate program in psychiatric nursing.

The grant will be in effect for a five-year period and will provide for study and experimentation on the incorporation of mental health instruction in a four-year collegiate program in nursing at UNC.

According to Dr. Elizabeth L. Kemble, Dean of the School of Nursing, Miss Barbara Bernard, Associate Professor of Psychiatric Nursing, will be directly responsible for the implementation of this program.

* * *

Dr. W. P. Richardson, assistant dean for Continuation Education, recently announced the preliminary program for the University of North Carolina School of Medicine Symposium to be held at the North Carolina Memorial Hospital on November 21 and 22. The faculty for this symposium will consist of visiting professors and members of the School of Medicine faculty.

A Symposium on Heart Disease will be held on Thursday, November 21, with Dr. Truman G. Schnabel, Jr., of the Philadelphia General Hospital, as a visiting participant. The case discussion method will be used, with conferences in small groups in the morning and a panel in the afternoon.

On Friday, November 22, Dr. Houston S. Everett of Johns Hopkins will speak on Urological Condi-

tions in the Female. Among other subjects to be presented are: Epiphyseal Fractures, Neck Injuries, Radiation Health, and Heart Disease in Pregnancy.

A complete program will be sent to all doctors in North Carolina, Virginia, and South Carolina in October.

* * *

Dr. Kenneth Brinkhous, professor and head of the Department of Pathology, has gone to Europe to attend a number of professional meetings.

He attended the International Congress on Clinical Chemistry in Sweden August 19-22.

He was one of the principal speakers for the Sixth Congress of the European Society of Hematology in Copenhagen August 26-September 2.

* * *

Dr. George C. Ham, professor and head of the Department of Psychiatry, attended a meeting of the Southern Regional Education Board in Williamsburg, Virginia, Monday through Wednesday, August 26-28.

The meeting was held to discuss training for research in psychiatry.

Dr. Ham was recently reappointed to the National Research Council of the Division of Medical Sciences Committee on Psychiatry in Washington, D. C.

Miss Phyllis Canup, assistant chief technician of the Department of Radiology of North Carolina Memorial Hospital, took a short course at Oak Ridge, Tennessee, in August.

Miss Canup studied radioactive isotope uptake in a course sponsored by the Atomic Energy Commission.

* * *

The following members of Psychological Services in the Department of Psychiatry attended the annual meeting of the American Psychology Association in New York City from August 30 to September 5. Drs. Mary G. Clarke, Shephard Liverant, Gordon E. Rader, Wilson Meaders; Messrs. Ehud Koch and Lon Ussery.

At this meeting Dr. Liverant presented two papers entitled respectively, "The Use of the Case Study in Clinical Psychology," and "Choice Behavior as a Function of Previous Experience with Reinforcement Probabilities."

NEWS NOTES FROM THE DUKE UNIVERSITY SCHOOL OF MEDICINE

Duke University's Heart Disease Institutes for North Carolina public welfare and vocational rehabilitation workers will enter their second year this fall under provisions of a new U.S. Public Health Service grant.

A second one-year training grant of \$10,000 has been awarded by the National Heart Institute, USPHS, effective September 1.

The grant provides for continuation of a series of training institutes in the field of cardiovascular

diseases for public welfare workers and vocational rehabilitation counselors in North Carolina. Miss Madge Aycock of the Social Service Division will continue as coordinator for the institutes.

Instructors for the institutes come from the Duke Medical Center; state agencies such as the Boards of Public Welfare and Public Health; the North Carolina Division of Vocational Rehabilitation; and the North Carolina Heart Association.

FORSYTH COUNTY MEDICAL SOCIETY

The Forsyth County Medical Society met in Winston-Salem on September 10. Dr. Elliott Scarborough, director of the Winship Tumor Clinic, Atlanta, Georgia, spoke on "Hormone and Chemotherapy of Cancer."

NEWS NOTES

The following North Carolina doctors were certified by the American Board of Obstetrics and Gynecology on May 25, 1957: John R. Ashe, Jr., Concord; William L. McLeod, Charlotte; Charles H. Peete, Jr., Durham.

* * *

Dr. Talbot F. Parker, Jr., has opened his office for the practice of obstetrics and gynecology at 401 North Herman Street in Goldsboro.

* * *

Dr. John F. Foster, 153 North Steele Street, Sanford, has announced the association of Dr. Paul O. Howard in the general practice of medicine and surgery.

* * *

Dr. Charles C. Stamey has announced the opening of his office for the practice of pediatrics and pediatric hematology, in association with Dr. William Hersey Davis, Jr., at 720 West Fifth Street, Winston-Salem.

* * *

Dr. F. A. Perreten has opened his office for the practice of ophthalmology at 209 Reynolds Building in Winston-Salem. He will be associated with Dr. L. Byerly Holt.

AMERICAN COLLEGE OF SURGEONS

All members of the medical profession are invited to attend any of the following 1958 Sectional Meetings of the American College of Surgeons being held in conveniently located cities of the United States, with one supplementary meeting in Sweden.

Meeting cities and dates follow:

Dallas, Texas, January 9-11; Jackson, Mississippi, January 16-18; New York City, March 3-6; Salt Lake City, Utah, March 17-19; Des Moines, Iowa, March 27-29; Stockholm, Sweden, July 2-7. Forty-fourth Annual Clinical Congress, Chicago, October 6-10.

AMERICAN COLLEGE OF GASTROENTEROLOGY

The Twenty-Second Annual Convention of the American College of Gastroenterology will be held at The Somerset in Boston, Massachusetts, on October 21, 22, 23.

In addition to the many individual papers to be presented, there will be panel discussions on Chronic Ulcerative Colitis, Diseases of the Esophagus, Peptic Ulcer and the Management of Massive Gastrointestinal Hemorrhage in Patients with Liver Disease. There will again be scientific as well as commercial exhibits, and the sessions will be open to all physicians without charge.

On October 24, 25 and 26, immediately following the Convention, Dr. Owen H. Wangenstein of Minneapolis, Minnesota, and Dr. I. Snapper of Brooklyn, New York, will again be the moderators of the Annual Course in Postgraduate Gastroenterology. The sessions will be held at The Somerset and in the Joslin Auditorium of the New England Deaconess Hospital. Attendance at the course will be limited to those who have registered in advance.

Copies of the program and further information concerning the Postgraduate Course may be obtained by writing to: American College of Gastroenterology, 33 West 60th Street, New York 23, New York.

PAN AMERICAN ASSOCIATION OF OPHTHALMOLOGY

The Pan American Association of Ophthalmology, an 18-year-old organization with some 2,000 members representing all the countries of the Western Hemisphere, will hold its second Cruise Congress, February 1-14, on board the S.S. Queen of Bermuda. The itinerary includes a day each in San Juan, Puerto Rico; Ciudad Trujillo, Dominican Republic; Kingston, Jamaica; Port-au-Prince, Haiti, and Nassau, Bahama Islands.

Dr. James H. Allen, New Orleans, is chairman of the program committee, which is arranging symposia, free papers, motion pictures, seminars and exhibits stressing subjects of current interest in diseases of the eye. Meetings will be held on shipboard and also in port cities with local societies of ophthalmologists. There will be opportunities to visit hospitals and to meet the staffs of medical schools in the islands.

Dr. William L. Benedict, Rochester, Minnesota, is chairman of the organizing committee, and Mr. Leon V. Arnold, 33 Washington Square West, New York 11, is in charge of arrangements. All reservations must be made through Mr. Arnold.

**EMORY UNIVERSITY SCHOOL
OF MEDICINE**

Atlanta, Georgia

Announces

**SIX DAYS
of
CARDIOLOGY**

(January 13-18, 1958)

**Major Problems of Heart Disease
will be discussed by**

**Members of the Emory University Faculty
and the following visitors:**

A. Carlton Ernstene, M.D.,

Chairman, Division of Medicine,
Cleveland Clinic, Cleveland, Ohio

Dwight Harken, M.D.,

Assistant Clinical Professor of
Surgery, Harvard Medical School;
Surgeon, Peter Bent Brigham Hospital;
Chief of Department of Thoracic Surgery,
Mount Auburn and Malden Hospitals,
Boston, Massachusetts

Helen B. Taussig, M.D.,

Associate Professor of Pediatrics,
The Johns Hopkins University
School of Medicine; Director of
the Children's Heart Clinic of
the Harriet Lane Home, The Johns
Hopkins Hospital, Baltimore, Md.

Eugene A. Stead, M.D.,

Professor and Chairman, Depart-
ment of Medicine, Duke University
School of Medicine, Durham, N. C.

Ancel B. Keys, M.D.,

Professor of Medicine, University
of Minnesota; Director of the Lab-
oratory of Physiological Hygiene,
University of Minnesota School of
Public Health, Minneapolis, Minn.

Edward S. Orgain, M.D.,

Professor of Medicine, Duke Univ-
ersity School of Medicine; Director,
Cardiovascular Disease Service, Duke
Hospital, Durham, North Carolina

E. Grey Dimond, M.D.,

Professor and Chairman of the
Department of Medicine; Director
of the Cardiovascular Laboratory,
University of Kansas Medical
Center, Kansas City, Kansas.

Gene H. Stollerman, M.D.,

Associate Professor of Medicine,
Northwestern University, Chicago,
Illinois.

Tuition fee: \$100.00

**Write: Postgraduate Teaching Program,
Emory University School of Medi-
cine, 69 Butler Street, Atlanta 3,
Georgia**

The Month in Washington

If dangerous epidemics of Asian influen-
za break out in the country this fall and
winter, the medical profession will have its
hands full. But the doctors won't be taken
by surprise, nor will they lack specific in-
formation on proper treatment.

While the attacks in the U.S. were still
sporadic and the death rate low — three
fatalities in the first 11,000 reported cases
— a number of major, nationwide efforts
were under way to combat the disease in the
months when influenza rates generally are
the highest.

1. Acting in coordination with U.S. Pub-
lic Health service, the American Medical
Association was pressing forward with its
campaign to insure that all physicians are
informed of how to deal with the disease.

2. In line with recommendations of the
A.M.A. committee, a number of state medi-
cal societies by mid-August had laid out
complete emergency plans, ready to be put
in operation if needed.

3. U.S. Public Health Service epidemic
intelligence experts were scanning the coun-
try for outbreaks that might be Asian in-
fluenza, and other PHS officers were in-
vestigating acute respiratory diseases. PHS
also set up machinery to keep the medical
and health professions informed on nation-
wide developments in the influenza picture.

4. Advising Surgeon General Burney was
a special committee, which included repre-
sentatives from the A.M.A., the American
Academy of Pediatrics, American Academy
of General Practitioners, and the Associa-
tion of State and Territorial Health Offi-
cers.

5. Manufacturers of the vaccine, by run-
ning their plants on two or three shifts and
seven days a week, were hoping to have
produced 60,000,000 cc. by February 1.

There was, of course, the possibility that
with Congress in session through most of
the summer a vast federal program would
be set up, with the U.S. purchasing and
allocating the vaccine. It was heartening to
the medical profession that this possibility
was pretty well eliminated in the early
stages when the Department of Health,

From the Washington Office of the American Medical Asso-
ciation.

Education, and Welfare announced the following as official policy:

The Public Health Service, in cooperation with the medical profession, will stimulate and promote a nationwide voluntary program of vaccination against the prevalent strain of influenza. It will not, however, request federal funds for the purchase or administration of vaccine—except for its own legal beneficiaries. The State and Territorial health officers and the American Medical Association have jointly assured the Surgeon General that community resources, both public and private, will be mobilized to provide vaccinations for persons who are unable to pay for such protection.

This policy was reaffirmed later by the White House, when the President asked for half a million dollars to finance the additional work for Public Health Service. The White House statement said flatly that it did not plan to have the federal government buy vaccine.

The A.M.A.'s Board of Trustees selected as members of the special committee the same physicians who make up the Civil Defense Committee, with Dr. Harold C. Lueth as chairman. In addition to the work of this committee, special articles are being published in the A.M.A. Journal, mass circulation media are being used to bring information on Asian influenza to the lay public, and the A.M.A. Council on Drugs is investigating and reporting to physicians on the use of antibiotics in treatment of the disease.

Notes

To wind up a long investigation of the safety of chemical additives to foods, a House committee called in a panel of scientists for two days of discussion. In general they concluded: Be careful about any mandatory federal controls.

Another hearing on weight-reducing preparations sold over-the-counter in drug stores heard a parade of witnesses, all of whom had about the same opinion: In themselves, the pills all are virtually useless in inducing loss of weight, but their other effects range from harmless to definitely dangerous.

* * *

Veterans Administration is increasing fees to physicians under the hometown care program, with the new schedules varying by states and areas. During this fiscal year VA will pay out \$8 million under this program.

A former A.M.A. president, Dr. Elmer Hess, now heads two government advisory committees, the Health Resources Advisory Committee to Office of Defense Mobilization and the Medical Advisory Committee to Selective Service, membership of which is the same. He succeeds Dr. Howard Rusk.

* * *

Secretary Folsom is considering appointing a committee of outsiders to investigate and evaluate progress on medical research by the federal government.

BOOK REVIEWS

Practical Gynecology (Ed. 2). By Walter J. Reich, M.D., and Mitchell J. Nechtow, M.D. 648 pages. Price, \$12.50. Philadelphia: J. B. Lippincott Company, 1957.

The jacket quotes *Postgraduate Medical Journal*—"... the book bristles with common sense ...", and the *Journal of the International College of Surgeons*—"... based solidly on the known facts of diagnosis and treatment ...". I hope that these statements do not mislead many people. It is distressing to find a purported textbook for general practitioners published in 1957 which advises so many therapeutic measures which are considered by the majority of gynecologists as archaic, of equivocal value, or absolutely contraindicated. To cite a few: thyroid for anteverted uterus and for infertility when no hypothyroid function is demonstrated, radium therapy for endometrial polyps, quinine for incomplete abortion, stem pessaries for dysmenorrhea, abortion for carcinoma of the breast, Lysol soaked pledgets for packing after an incomplete abortion.

At a time when we are all becoming more convinced that irradiation therapy for any condition other than malignancy needs close re-evaluation, this book advises radiation for pruritus vulvae, for sterilization, for fibroids, and even for ovarian cysts. To my knowledge, all accepted authoritative reviews have shown that of all genital malignancies, vulvar cancer responds least well to irradiation, yet this book states it "can be controlled by radiation therapy as any other skin cancer."

The section on endocrinology is superficial and omits or barely mentions advances within the past 10 years. This amazing "new" book only mentions the use of antibiotics for pelvic tuberculosis after emphasizing x-irradiation and pneumoperitoneum as therapeutic measures.

Routine Papanicolaou smears and biopsy of all suspicious lesions are justifiably recommended for early diagnosis of cancer, but the almost uni-

versally used New International Classification of cervical cancer as to stage is completely omitted.

Quotation of definitely analyzed experience at Cook County and other teaching centers is impressingly minimized. Clinical diagnosis embodying proper understanding of psychosomatic gynecology is well set forth, but this fact does not constitute enough positive material to recommend this book for students, general practitioners, or specialists.

Science Looks At Smoking: By Eric Northup. With an Introduction by Dr. Harry S. N. Greene, Chairman, Department of Pathology, Yale University. 190 pages. Price \$3.00. New York: Coward-McCann, Inc., 1957.

This book was written by a trained writer on medical subjects, who has made a painstaking study of the arguments for and against cigarette smoke as a factor in producing lung cancer. It has a lengthy introduction by Dr. Harry S. N. Greene, chairman of the Department of Pathology, Yale University. Although neither Dr. Greene nor the author accept the theory that cigarette smoke is carcinogenic, they have studied both sides of the question, and the book can not be dismissed as mere propaganda.

The reports of Doll and Hill and of Hammond and Horn are discussed and criticised as being based solely on statistics, without offering experimental proof that cigarette smoke contains carcinogens. The experiment of Wynder and Graham in producing cancer on the shaved skin of mice is discounted on the ground that the mice used were from a strain very susceptible to cancer, and that scores of other similar experiments have failed to yield the same results.

Dr. Greene's introduction is followed by nine chapters on the following subjects: Should You Smoke? The Pros and Cons; What We Know—and Don't Know—About Cancer; Lung Cancer: Some Facts and Figures; The "Coronary" Question; Tobacco: Fact and Fiction; Men, Mice and Smoking; Some Medical Facts, The Real Work To Be Done; Should You Smoke?

This book will be welcomed by the tobacco industry. Confirmed smokers will find comfort in Dr. Greene's conclusion: "The evidence from both approaches, statistical and experimental, does not appear sufficiently significant to me to warrant forsaking the pleasure of smoking. As a matter of fact, if the investigations had been pointed toward some material that I thoroughly dislike, such as parsnips, I still would not feel that evidence of the type presented constituted a reasonable excuse for eliminating the things from my diet."

In Memoriam

PAUL HAYNE MITCHELL, M.D.

Ahoskie and the Hertford County community as well as the medical profession at large suffered a severe loss on Wednesday, July 24, 1957 when Dr. Paul Hayne Mitchell died. Dr. Mitchell was 71 years of age at the time of his last illness, a cerebrovascular accident of relatively short duration. Dr. Mitchell has continued in the active practice of medicine until the day of his admission to the Roanoke-Chowan Hospital.

Dr. Mitchell was born in Ahoskie, July 5, 1886, the son of Dr. Jesse H. and Rosa Montgomery Mitchell, who were themselves pioneers in the community. "Dr. Paul", as he was affectionately known by hundreds of patients and friends, was born before Ahoskie was an incorporated town.

Essentially, he spent his entire life in this community, graduating from Ahoskie High School and leaving only to attend Wake Forest College and the University College of Medicine at Richmond, Virginia. He graduated from the latter in 1907 and served an internship of one year at the Sarah Leigh Hospital in Norfolk, Virginia. Thereafter, he spent his entire professional career in Ahoskie and its environs.

Dr. Mitchell became a member of the "50 year club" of the Medical Society of the State of North Carolina at the Asheville meeting of the Society in the spring of 1957. His 50-year pin was awarded along with those given to several of his colleagues at a special ceremonial meeting of the First District Medical Society held in Edenton on May 29.

Dr. Mitchell was a member of the Ahoskie Methodist Church as well as many civic groups. His funeral services were conducted in the sanctuary of the church with members of the Hertford County Medical Society serving as active pallbearers. "Dr. Paul," during his many years of service and toil, was friend, confidant and doctor to unnumbered hundreds of all races and stations in life. His demise removes from the Ahoskie scene the last of the old "country doctors" of its pioneer days.

Now THEREFORE it is moved, seconded and adopted that this resolution and expression of our deep bereavement and sense of loss at the passing of our friend and colleague be sent to the family of the late Dr. Paul Hayne Mitchell. Furthermore, this resolution is to be entered into minutes of this society, with copies to be transmitted to the First District Medical Society and the Medical Society of the State of North Carolina for publication in the *North Carolina Medical Journal*.

Adopted this nineteenth day of August, 1957.

Archie Y. Eagles, M.D.

Joe Lee Frank, Jr., M.D.,

Committee on Resolutions,

Hertford County Medical Society

1957
TRANSACTIONS
OF THE
AUXILIARY TO THE MEDICAL SOCIETY
OF THE STATE OF NORTH CAROLINA

THIRTY-FOURTH ANNUAL MEETING

held at

ASHEVILLE, NORTH CAROLINA

MAY 5-7, 1957

President, Mrs. Harvey C. May, Charlotte
Recording Secretary, Mrs. R. L. Garrard, Greensboro
Treasurer, Mrs. J. M. Hitch, Raleigh

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TRANSACTIONS OF THE AUXILIARY

THE AUXILIARY TO THE MEDICAL SOCIETY of the STATE OF NORTH CAROLINA Mrs. Harvey C. May President

Memorial Service

The Memorial Service of the Auxiliary to the Medical Society of the State of North Carolina was held in conjunction with the Medical Society on Sunday, May 5, 1957 at 8:00 P.M. in the Gold Room of the Battery Park Hotel in Asheville. Dr. Charles H. Pugh, Chairman of the Committee on Necrology, presided. The Invocation was given by Dr. Embree H. Blackard, Pastor of the Central Methodist Church of Asheville. Dr. Pugh read the list of 44 North Carolina doctors who had died during the year 1956-1957. Mrs. Charles T. Grier, Chairman of the Memorials Committee of the Auxiliary to the Medical Society of the State of North Carolina read the list of 12 deceased Auxiliary members and offered a brief prayer for their eternal rest. A list of these deceased members is filed with these Minutes.

A program of choral music was presented by the Christ School Boys' Choir under the direction of Mr. Urquart Chinn, followed by a memorial address by Dr. Blackard. A Choral Postlude and Benediction concluded the Memorial Services.

Mrs. Robert L. Garrard
Recording Secretary

Mrs. Harvey C. May
President

Date: June 20, 1957

Executive Committee—Annual Meeting 1957

The Annual Meeting of the Executive Committee of the Auxiliary to the Medical Society of the State of North Carolina was held Monday, May 6, 1957, at 10:00 A.M. in the Mountaineer Room of the Grove Park Inn, Asheville, N. C., Mrs. Harvey C. May, President, presiding. Present for the meeting were: Mrs. Harvey C. May, President; Mrs. Donnie M. Royal, President-Elect; Mrs. R. D. Croom, Jr., First Vice-President; Mrs. Lenox D. Baker, Second Vice-President; Mrs. J. M. Hitch, Treasurer; and Mrs. Robert L. Garrard, Recording-Secretary.

The Treasurer supplied those present with copies of a Financial Statement as of April 26, 1957, and a copy of the Budget for 1957-58. The corrections necessary to make the Financial Statement current were made.

The Committee passed the following recommendations to be presented to the Board of Directors:

- (1) The Executive Committee recommends to the Nominating Committee that the candidate for President-Elect for 1958-59, be from the Western section of the State, if possible, in order that the terms of the officers of the Auxiliary coincide with the terms of the officers of the Medical Society.
- (2) The Executive Committee recommends that a committee, composed of at least 3 Past Presidents, be appointed to study the feasibility of a permanent Handbook. The report of this committee to be presented at the Fall Meeting of the Board of Directors.

The meeting was adjourned at 10:55 A.M.

Mrs. Robert L. Garrard,
Recording Secretary

Mrs. Harvey C. May,
President

Date: June 20, 1957

Annual Meeting Of The Board Of Directors—1957

The Annual Meeting of the Board of Directors of the Auxiliary to the Medical Society of the State of North Carolina was held Monday, May 6, 1957, in the Mountaineer Room of the Grove Park Inn, Asheville, N. C. The meeting was called to order at 11:20 A.M. by Mrs. Harvey C. May, President.

After the Invocation by Mrs. Donnie M. Royal, President-Elect, the Minutes of the previous meeting were read and approved. The President expressed thanks to the Convention Committee of the hostess Auxiliary, Buncombe County, for the excellent arrangements for the Annual Meeting made by this Committee. She also expressed her thanks to Mrs. Julian Moore for her corsage of dollar bills, a gift of the Buncombe County Auxiliary. Several Convention announcements were made.

In order that the Annual Reports be as nearly accurate as possible, Mrs. May requested that those Officers and Chairmen who had additions or changes to the mimeographed Annual Reports to note these changes when called upon.

Copies of the Budget for 1957-58, and a Financial Statement as of April 26, 1957, were distributed. Mrs. Hitch, Treasurer, gave the necessary corrections to make the Financial Statement current, stating the latest membership figure of 2,174. She called attention to the item of \$300. contributed by the Medical Society toward the expenses of the President and President-Elect to attend the National Fall Conference, as shown in the Budget for 1957-58. Mrs. Hitch moved that the Budget for 1957-58 be accepted. The motion was seconded and passed. She then presented the names of three (3) proposed Honorary Members: Mrs. Clarence E. Judd, Raleigh; Mrs. A. Byron Holmes, Fairmont; and Mrs. W. P. Knight, Greensboro; and the names of the three (3) members eligible for Life Membership: Mrs. Alexander C. Bulla, Raleigh, who has paid dues for 35 consecutive years; Mrs. Paul A. Yoder, Winston-Salem, who has paid dues for 31 consecutive years, and Mrs. Robert L. Murray, Raeford, who has paid dues for 30 consecutive years. Mrs. Hitch moved that these be made Honorary Members and Life Members, respectively, in accordance with the provisions of the By-Laws. The motion was seconded and passed.

Mrs. Donnie M. Royal, President-Elect, reported that all but one of the Committee Chairmen for 1957-58 had been secured.

Mrs. R. D. Croom, First Vice-President, expressed her gratification at the progress made in organization, with the addition of five (5) newly organized or re-organized Auxiliaries. The additions to her report were made directly to the mimeographed Annual Reports, a copy of which is filed with these Minutes. She then recognized the ten (10) District Councilors.

Mrs. Lenox D. Baker, Second Vice-President, reported on the guests occupying the four (4) Sanatoria Beds and recognized the Bed Chairmen. She presented a suggestion from Mrs. Roscoe D. McMillan, Chairman of the Student Loan Fund, that Mr. Norris Biggerstaff, a medical student receiving aid through the Student Loan Fund, who is in need of additional help of a more personal nature, be given this aid by contributions from the County Auxiliaries. It was suggested that the family's needs be published in the Auxiliary News, and contributions sent directly to Mrs. McMillan. Additions were made to the Annual mimeographed report.

In the absence of Mrs. Lewis McKee, Legislation

Chairman, Mrs. May listed bills pending before the General Assembly of North Carolina, which were of interest to the Medical Profession.

The Annual Report of the President of the year's activities, incorporating the corrections and additions of the Officers and Chairmen, was presented. The corrected copy is filed with these Minutes.

The Recording Secretary was requested to read ARTICLE V, Section 5, of the By-Laws regarding the Nominating Committee, after which the President asked for Nominations to the Nominating Committee, consisting of five (5) members and two (2) alternates. The following were nominated and elected to serve as the Nominating Committee for 1957-58:

Mrs. Thomas P. Brinn, 1st District
 Mrs. Edward Schoenheit, 10 District—
 Chairman
 Mrs. Carroll C. Lupton, 8th District
 Mrs. Charles T. Wilkinson, 6th District
 Mrs. Robert A. Matheson, 5th District
 Mrs. E. L. Strickland, 4th District—
 Alternate
 Mrs. Frank W. Jones, 9th District—
 Alternate

The report of Dr. Roscoe McMillan, Chairman of the Advisory Committee, to the House of Delegates of the Medical Society, was read by the Recording Secretary since he was unable to be present due to illness. He commended the work of the Auxiliary, and presented the following recommendations:

"We recommend as soon as feasible some plan should be worked out either for a full-time or certainly a part-time Executive Secretary for the Auxiliary."

The following New Business was presented:
 Two (2) recommendations from the Executive Committee:

- (1) The Executive Committee recommends to the Nominating Committee that the candidate for President-Elect for 1958-59 be from the Western section of the State, if possible, in order that the terms of the officers of the Auxiliary coincide with the terms of the officers of the Medical Society.
- (2) The Executive Committee recommends that a committee, composed of at least 3 Past Presidents, be appointed to study the feasibility of a permanent Handbook. The report of this committee to be presented at the Fall Meeting of the Board of Directors.

Mrs. T. P. Brinn moved the acceptance of both motions, seconded by Mrs. William Long. The motion carried unanimously.

Mrs. Carroll C. Lupton, President, Guilford County—Greensboro Branch, displayed an emblem, designed by a Guilford member, which has been adopted by that Auxiliary as the official emblem for use in the observance of Doctors' Day, March 30th. Mrs. Lupton moved that the emblem be adopted by the Auxiliary to the State of North Carolina as the official Doctor's Day Emblem, and that North Carolina present this emblem to the Woman's Auxiliary to the Southern Medical Association with the recommendation that that organization also adopt it as the official Doctor's Day Emblem. The motion was seconded by Mrs. Lenox D. Baker, and the motion carried unanimously.

There being no further business, the meeting adjourned at 12:50 P.M.

Mrs. Robert L. Garrard,
 Recording Secretary

Mrs. Harvey C. May,
 President

Date: June 20, 1957

Annual Meeting Of The House Of Delegates—1957

The Annual Meeting of the House of Delegates of the Auxiliary to the Medical Society of the State of North Carolina was held on Tuesday, May 7, 1957, in the Lobby of the Grove Park Inn, Asheville, N. C. The meeting was called to order at 9:30 A. M. by Mrs. Harvey C. May, President. The Invocation was given by Mrs. Charles T. Grier. The President announced that the Roll Call would be omitted since all Delegates had been checked by the Credentials Committee at the door. A list of Delegates and their alternates is filed with these minutes.

The motion to dispense with the reading of the Minutes was made and passed. It was announced that Mrs. R. D. Croom, Jr., First Vice-President, would serve as acting Parliamentarian. Mrs. Eugene C. Clayton, Convention Co-Chairman, made several announcements and gave the total registration for the Convention, as of Tuesday morning, as 301. Mrs. May requested that Buncombe County be credited with a contribution to the A.M.E.F. for \$8.00 for her corsage, a gift of that Auxiliary.

The Annual Report of the President of the year's activities, incorporating the corrections and additions of the Officers and Chairmen, was presented. The corrected copy is filed with these Minutes.

Copies of the Doctor's Day Report and the report of the Memorial Chairman were presented to each Delegate and are filed with the Minutes. The reports of the President-Elect, Recording Secretary and Corresponding Secretary were dispensed with, having been presented to the Board of Directors and mimeographed with the Annual Reports.

Mrs. J. M. Hitch, Treasurer, provided a copy of the 1957-58 Budget and a Financial Statement, as of May 6, 1957, to each Delegate.

In the absence of Mrs. Lewis McKee, Mrs. May listed bills pending before the General Assembly of North Carolina which were of interest to the Medical Profession and the Auxiliary. They included a bill authorizing state, county, and municipal agencies and commissions to recognize opticians; another establishing a 2% license tax on incomes of physicians exceeding \$15,000. The Mental Health Chairman for the Auxiliary had been instrumental in having introduced a bill to establish a commission to study the out-dated laws in North Carolina pertaining to sex crimes; and had made contacts and inquiries in favor of an appropriation for the construction of a hospital for the care of emotionally disturbed children in connection with the State Hospital at Butler.

The President expressed her regrets that many reports did not appear in the mimeographed Annual Reports since they had not been received in sufficient time. She urged that some method be devised to encourage prompt submission of the Annual Reports.

Mrs. R. D. Croom, First Vice-President and Chairman of Organization, displayed a map of North Carolina with organized counties indicated in green and expressed the hope that some day the map may be entirely green. After commending the Councilors for their excellent work, she introduced the six Councilors who were present, and they in turn introduced the Presidents of the Auxiliaries comprising their Districts.

The Second Vice-President and Chairman of Activities, Mrs. Lenox D. Baker, introduced the two Sanatoria Bed Chairmen who were present, and repeated the suggestion of Mrs. R. D. McMillan, Chairman of the Student Loan Fund, that Mr. Norris Biggerstaff, a medical student receiving aid through the Student Loan Fund, who is in need

of additional help of a more personal nature, be given this aid by contributions from county Auxiliaries. The appeal for this aid will be published in the *Auxiliary News*, and contributions sent directly to Mrs. McMillan.

The President requested the First Vice-President, Mrs. R. D. Croom, to assume the chair during the presentation of the recommendations from the Board of Directors. Mrs. May announced the election, by the Board of Directors, of the Nominating Committee: Mrs. T. P. Brinn, Mrs. Edward Schoenheit, Mrs. Carroll C. Lupton, Mrs. C. T. Wilkinson, Mrs. R. A. Matheson; and alternates, Mrs. E. L. Strickland and Mrs. Frank Jones.

The following recommendations from the Board were presented:

- (1) The Board of Directors recommends to the Nominating Committee that the Candidate for President-Elect for 1958-59 be from the Western section of the State, if possible, in order that the terms of the officers of the Auxiliary coincide with the terms of the officers of the Medical Society.

Mrs. May moved that the recommendation be adopted. The motion was seconded by Mrs. C. T. Wilkinson and passed.

- (2) The Board of Directors recommends that a committee, composed of at least 3 Past Presidents, be appointed to study the feasibility of a permanent Handbook. The report of this committee to be presented at the Fall Meeting of the Board of Directors.

Mrs. May moved that the recommendation be adopted. The motion was seconded by Mrs. Charles Norfleet and passed.

- (3) The Board of Directors recommends that the Auxiliary to the Medical Society of the State of North Carolina adopt its official insignia for Doctor's Day, the emblem designed and presented by the Guilford Auxiliary (Greensboro Branch), and that this emblem be presented to the Woman's Auxiliary to the Southern Medical Association with the recommendation that the emblem be adopted as the official Doctor's Day insignia of the organization.

Mrs. May moved that this recommendation be adopted. The motion was seconded by Mrs. Baxter Troutman. During the discussion which followed Mrs. C. C. Lupton, President, Guilford Auxiliary, (Greensboro Branch) explained that the 3 carnations represented Faith, Hope and Courage. The motion passed unanimously.

Mrs. J. M. Hitch, Treasurer, presented the Budget for 1957-58 and moved that it be adopted. The motion was seconded by Mrs. L. E. Fields and was carried.

In accordance with the By-Laws, Mrs. Hitch read the names of the three members who had been proposed for Honorary Membership at the Fall Meeting of the Board of Directors. These were: Mrs. E. Clarence Judd of Raleigh, Mrs. W. P. Knight of Greensboro, and Mrs. A. Byron Holmes of Fairmont. Mrs. C. C. Lupton moved that Mrs. Judd, Mrs. Knight and Mrs. Holmes be made Honorary Members. The motion was seconded by Mrs. R. D. Croom, and passed, making a total of five (5) Honorary Members.

The chair requested a motion enabling the incoming President to appoint Delegates to the Annual Convention of the Woman's Auxiliary to the American Medical Association, North Carolina being entitled to twenty (20) Delegates. Mrs. Baxter Troutman moved that Mrs. Royal, incoming President, be given such authority. The motion was seconded by Mrs. Lenox Baker and was carried.

The First Vice-President and Chairman of Organization, Mrs. R. D. Croom, presented a petition from Franklin County to disband. Mrs. James Croom moved that Franklin County Auxiliary be permitted to disband. Mrs. Paul Johnson seconded the motion and the motion was passed.

There being no further business, the meeting adjourned at 10:50 A. M.

Mrs. Robert Garrard,
Recording Secretary

Mrs. Havey C. May
President

Date: June 20, 1957

General Meeting—1957

The General Meeting of the Auxiliary to the Medical Society of the State of North Carolina was held in the Main Lobby of the Grove Park Inn, Asheville, N. C., on Tuesday, May 7, 1957, at 11:10 A.M.

Due to a conflicting appointment Dr. Donald B. Koonce, President of the Medical Society of the State of North Carolina, requested an early appearance on the program, and at that time he expressed his pleasure at being invited to appear before the General Meeting of the Auxiliary. He congratulated the Buncombe Auxiliary for the magnificent job they had done in arranging for the Convention. He also said that he was sure that many of the problems and confusions encountered for this meeting would be eliminated by Convention time in 1958, when the Medical Society and the Auxiliary would return to Asheville for their annual meetings. He commended the work of the Auxiliary, and expressed a feeling of optimism with the knowledge of the large number of members who were actively participating in the work. He especially commended the success of the Public Relations projects.

At the conclusion of his remarks Dr. Koonce made the presentation of pins to the Past Presidents. Those present and receiving their pins personally were: Mrs. A. Byron Holmes, Mrs. Charles F. Strosnider, Mrs. Clyde R. Hedrick, Mrs. Robert A. Moore, Mrs. Karl B. Pace, Mrs. John T. Saunders, Mrs. Reece Berryhill, Mrs. Gilbert M. Billings, Mrs. Robert D. Croom, Jr., and Mrs. Havey C. May. Dr. Robert D. Croom, Jr., aided the presentation by securing the pins of Mrs. Croom and Mrs. A. Byron Holmes. Mrs. Holmes spoke for the Presidents, saying they took great pride in accepting the pins for their years of service, and that working with the Auxiliary, watching it grow, and participating in its accomplishments had been a truly wonderful experience.

Mrs. May announced that all Past Presidents who were unable to be present would be sent their pins. All living Past Presidents will receive pins. Several had donated to the Yoder Bed Fund an amount equal to the cost of their pins.

Mrs. S. S. Cooley, President of the Buncombe Auxiliary, brought a warm welcome. She noted that in April, 1923, the Auxiliary to the Medical Society was organized in Asheville with Mrs. Paul McCain President. Now, after many years, the Auxiliary, grown from an infant to a giant was back in Asheville and she expressed pleasure at being able to entertain the Auxiliary once again in its birthplace. Mrs. Amos N. Johnson, Third District Councilor, expressed the thanks of the Auxiliary for the wonderful hospitality.

A motion to dispense with the reading of the Minutes was made by Mrs. R. D. Croom, Jr., seconded by Mrs. J. M. Hitch, and was carried.

The President introduced Mrs. Oscar W. Robinson, President of the Woman's Auxiliary to the Southern Medical Association, who presented greet-

ings from Southern. She urged attendance to the Annual Convention of Southern, to be held in Miami Beach, November 11-14, 1958. She emphasized that the Woman's Auxiliary to Southern was like any other Auxiliary except that members pay no dues, becoming members with the membership of their husbands. She then reviewed briefly the principal objectives of the organization: (1) Doctor's Day, (2) Research and Romance of Medicine, (3) Public Relations. Mrs. Robinson concluded her remarks by saying that at all times Southern wants to keep a strong place in good fellowship, good feeling and public relations.

Mrs. May then introduced Mrs. Clark Bailey, Second Vice-President, Woman's Auxiliary to the American Medical Association, who expressed her pleasure at being in North Carolina again, and brought greetings from Mrs. Ralph Flanders, President of the Woman's Auxiliary to the A.M.A. Mrs. Bailey reviewed the significance of the national motto "Health is Our Greatest Heritage," and called attention to some of the various projects of the national organization: (1) Health Education, (2) Legislation, (3) Recruitment, (4) American Medical Foundation; and the primary function of furthering friendly relations among the families of physicians. She emphasized the necessity of continued cooperation with the parent organization of the Auxiliary—the Medical Society.

The President made several announcements, calling attention to the Auxiliary Bridge Party on Wednesday morning. She requested the Corresponding Secretary to send letters of thanks from the Auxiliary to Dr. Donald B. Koonce; Mr. James T. Barnes, Executive Secretary to the Medical Society; the officers and members of the Buncombe Auxiliary; Dr. Millard Bethel, President of the Mecklenburg County Medical Society; the Coca Cola Bottling Company of Asheville; and the various drug houses who had supplied favors and prizes for the Convention.

Mrs. William A. Greene, Chairman of the Awards Committee, announced the winners of awards offered for the current year. Awards were won by:

- (1)
 - (a) Nurse Recruitment—(Under 30 members) Donor:—Mrs. A. R. Cross; Lenoir County.
 - (b) Nurse Recruitment—(Over 30 members) Donor:—Mrs. Frederick R. Taylor; Mecklenburg County.
- (2) TODAY'S HEALTH — Donor:—Mrs. Karl B. Pace; Stanly County. Honorable mention: Columbus County.
- (3) Student Loan Fund—Donors:—Mrs. Roscoe D. McMillan and Mrs. B. Watson Roberts; Cleveland County.
- (4) One hundred per cent Dues Paid—Donors:—Mrs. Gilbert M. Billings and Mrs. Harvey C. May; Surry-Yadkin County and Watauga County.
- (5) American Medical Education Foundation—Donor:—Mrs. Powell G. Fox; Gaston County.
- (6) Yoder Bed Award—Donor:—Mrs. Robert D. Croom, Jr., Forsyth-Stokes County.
- (7) Doctor's Day—Donor: — Mrs. Harvey C. May; Buncombe County and Forsyth-Stokes County.

Mrs. William R. Romm, Chairman of the Nominating Committee presented the following slate for 1957-58:

President-Elect: Mrs. Paul W. Johnson,
Winston-Salem

Recording-Secretary: Mrs. Charles W. Norfleet, Winston-Salem

There were no nominations from the floor and Mrs. C. T. Wilkinson moved the nominations be closed. The motion was seconded by Mrs. Baxter Troutman, and was carried. Mrs. Wilkinson then moved that the slate of officers be accepted as presented. The motion was seconded by Mrs. A. Byron Holmes and the officers were elected by unanimous vote.

In the absence of Mrs. Paul P. McCain, Founding President, who traditionally installs the new officers, Mrs. May called upon Mrs. Clark Bailey to conduct the installation. Mrs. Bailey requested Mrs. Donnie M. Royal, Mrs. Paul W. Johnson, and Mrs. Charles W. Norfleet to come to the front where they repeated the Auxiliary Pledge. She reminded the new officers that they will lead a special group, having an opportunity not only to lead but to serve. She stated that Mrs. Royal would make a wonderful President, urged the President-Elect to use her year as a year of training, and reminded the Recording Secretary that her work of keeping accurate records was of major importance to the proper functioning of the organization. She then called upon Mrs. Joseph H. Hitch, Treasurer, although she was not being installed at this time, and gave her special commendation for the outstanding service she had rendered the Auxiliary. She congratulated the incoming officers as Mrs. May presented the gavel to Mrs. Royal.

In accepting the gavel, Mrs. Royal said that she prayed that she might have the wisdom to use it as a good and faithful servant of the Auxiliary. She said she recognized the tremendous responsibilities connected with the high office and asked the help and cooperation of all. It was her desire for everyone to serve in some capacity.

Mrs. Royal asked that all those who planned to attend the A.M.A. Convention speak with her directly after the meeting. Mrs. Robert D. Croom asked for a rising vote of thanks for the excellent work done by the outgoing President, Mrs. Harvey C. May.

There being no further business, the meeting adjourned at 1:00 P.M.

Mrs. Robert L. Garrard,
Recording Secretary

Mrs. Harvey C. May,
President

Date: June 20, 1957

THE AUXILIARY TO THE MEDICAL SOCIETY of the STATE OF NORTH CAROLINA Mrs. Harvey C. May President

TO: THE BOARD OF DIRECTORS AND AUXILIARY DELEGATES

Herewith is the Annual Reports of the Auxiliary for the year terminating May 7, 1957. These are forwarded to permit review in detail in advance of the meeting of the House of Delegates. Please read them carefully and preserve the copy for your Auxiliary files.

In the event your alternate is required to attend in your stead, this compilation should be placed in your alternate's possession and she should bring it with her to the meeting on May 7, 1957.

Respectfully,
Mrs. Harvey C. May
President

March 1, 1957

Annual Report of the President of the Auxiliary To the North Carolina Medical Society 1956-57

The following report is submitted by the President of the Auxiliary to the Medical Society of

the State of North Carolina for the year 1956-57.

The tenure of office began on May 1, 1956. The committee chairmen had been secured prior to this time. Presented at the Auxiliary Breakfast was a tentative program for the Fall meeting of the Board of Directors and the Workshop to be held in Charlotte, September 12, 1956.

In June 1956, the North Carolina report was read at the Annual Convention of the Woman's Auxiliary to the American Medical Association in Chicago.

The new *Handbook and Supplement*, dedicated to the Past Presidents, was prepared as an aid to Board members and County Presidents by the Committee headed by Mrs. Charles H. Gay. This material and a copy of the Revised By-Laws was mailed to the Members of the Advisory Committee of the Medical Society, the Executive Secretary of the Medical Society, the Presidents of the Woman's Auxiliary to the A.M.A., and the Woman's Auxiliary to the Southern Medical Association, members of the Board of Directors, and fifty County Presidents prior to the meeting on September 12th.

In August the final program for the meeting was mailed. We were privileged to have Mr. James T. Barnes, Executive Secretary of the Medical Society, and Mr. Kenneth G. Beeston, Director of Physicians Relations of the Hospital Saving Association, speak to us on the Doctors' Insurance Plan. Mr. William N. Hilliard, Executive Assistant for Public Relations for the Medical Society, spoke on basic publicity methods, and Dr. Donald B. Koonce, President of the Medical Society, presented the plans for the proposed Medical Society Building. Dr. Cyrus H. Maxwell, Assistant Director of the Washington Office of the A.M.A., pictured the "Washington Scene." Due to illness, Dr. Roscoe D. McMillan, Chairman of the Advisory Committee, was unable to attend, and none of the other five members of the Committee attended.

After these addresses there followed a Panel on Organization with Mrs. Robert D. Croom, First Vice-President, as moderator, and a Discussion of the *Handbook*, with Mrs. Charles H. Gay as moderator. An evaluation sheet was distributed at the meeting the results of which were published in the Fall Issue of the *Auxiliary News*. A record number of 100 members attended. Mrs. A. L. DeCamp served as Arrangements Chairman. The Board of Directors met immediately following the Workshop and a tea at the Florence Crittenton Home was held upon adjournment.

The following are reports of the years activities:

Membership And Organization

The total paid membership, May, 1957, is 2,200, an increase of 148 members. We have an estimated possible membership of 2,351, and 61 members-at-large. Districts 1 and 4 are 100 per cent organized, and 8 counties report 100 per cent membership: Pitt, Chowan-Perquimans, Bladen, Scotland, Gaston, Surry-Yadkin, Caldwell, and Watauga. Twenty counties have reported an increase in membership, and ten reported a decrease.

There are five newly organized counties: Bladen in the Third District; and Cleveland, Stanly, Rutherford, and Union in the Seventh District, leaving a total of 56 organizations representing 75 of the 100 North Carolina counties, and compared to 80 organized Medical Societies, with Franklin County disbanding.

Five Auxiliaries have reported the adoption of new Constitutions resulting in better organization, facilitating more active participation in all programs.

American Medical Education Foundation

Contributions made by 41 counties to the American Medical Education Foundation total \$880.80, an alarming decrease from the 1955-56 contributions of \$1,039.80.

Auxiliary News

Four editions of the *Auxiliary News* have been prepared by the Editor, Mrs. Wm. S. Joyner. These have been published by the Hospital Saving Association at a total estimated cost to the Auxiliary of \$168.80, for the expense of mailing.

Bulletin

Fifty members are subscribing to the quarterly publication of the Woman's Auxiliary to the American Medical Association, *THE BULLETIN*. One hundred fifteen subscribed in 1955-56.

Civil Defense

Sixteen Auxiliaries report either active cooperation with Civil Defense or having had an Auxiliary Program devoted to that subject. Beaufort-Hyde County members are serving as plane spotters, and teaching courses in Red Cross and Civil Defense Nursing. The Auxiliary was represented at the Southeastern Regional Civil Defense Conference by the President.

Doctor's Day

Fifty counties participated in this program of the Southern Medical Auxiliary. This is an increase of nearly 30 per cent over those who participated in 1955-56. Forty-one Auxiliaries reported their observance to the Doctor's Day chairman.

Historian

At the 1956 Annual Convention the Historian, Mrs. Frank Jones, was directed to compile a History of the Auxiliary for presentation at the 1958 Annual Convention. To facilitate this work and prepare Auxiliary records for storage in the proposed Medical Society Building, a special Archives Committee, composed of the Historian and the Past Presidents, was established by the Board of Directors. This Committee met in January 1957, and reorganized all the material contained in the "President's File." This work was in addition to compiling an annual history of the activities of the state. It is regrettable that only 27 of the 55 counties were able to supply the Historian with their county reports in ample time for her report to be complete.

Legislation

Each county chairman for Legislation or County President has been kept informed of this very vital facet of Auxiliary work through the weekly A.M.A. "Washington News Letter." In June sixteen of the larger counties were notified by wire, at the request and expense of the Medical Society, of continued necessity of contacting the two United States Senators to urge opposition to the proposed disability amendments to the Social Security Act. Unfortunately both Senators Erwin and Scott saw fit to support the measure and in August 1956 it became Public Law #880.

Thirty Auxiliaries have reported keeping their memberships informed on legislative matters. Scotland, Forsyth-Stokes and Mecklenburg Counties had programs given by Dr. Roscoe McMillan, Dr. Howard H. Bradshaw and Dr. V. K. Hart, all speaking on the Doctors' Insurance Plan. This was in addition to that portion of the Workshop devoted to the subject. Forsyth-Stokes included a Legislation column in their monthly "News Letter" to keep informed their absent members. More activity is expected in Legislation during the coming spring and summer months while the 85th Congress and the North Carolina General Assembly are in session. The Auxiliary has been requested by the Mental Health Committee of the Medical Society to aid in their work with the General Assembly.

Mental Health

With the excellent leadership of Mrs. James B. Lounsbury this important field of Auxiliary activity has continued to grow in the interest of County Auxiliaries. Twenty-nine counties appoint-

ed Mental Health chairmen, an increase of ten. Fifteen provided the Chairman with an annual report. Twenty indicated in their report to the President either active participation in the Mental Health project or having had a meeting devoted to the subject. In cooperation with the P.T.A. the Lincoln County Auxiliary arranged programs for both the Elementary and High Schools in that county. In addition, a public lecture by Dr. Marshall Fisher, President of the North Carolina Mental Health Society, was presented and a series of four lectures on "The Effect of Discipline on the Mental Health of the Small Child" was given to parents and teachers. Gaston County is mapping a long range program in connection with the juvenile court termed "Big Sisters." In Wake County the Auxiliary was instrumental in establishing a local Mental Health Association Chapter. In keeping with the National Auxiliary's emphasis on emotionally disturbed children, Lee, Forsyth-Stokes, and Mecklenburg counties had programs concerning this problem, and gave donations to various institutions for these children. Two counties are actively participating in a community effort to stimulate interest and obtain financial support to establish local Mental Health Clinics.

The Mental Health Committee of the Medical Society has appointed a member to work closely with the Auxiliary in order that it may better assist in the Mental Health Program of the Society, particularly certain state legislation and appropriations pertaining to Mental Health. The Committee also requested the Auxiliary to make a survey of the number and use of psychiatric beds in General Hospitals throughout the State.

Public Relations

The field of Public Relations is the most constant and active endeavor of the Auxiliary. As community leaders they participate in all civic, religious, educational, cultural, and charitable activities. Our Chairman, Mrs. George W. Holmes, estimates that 82 per cent of the membership joins in this leadership.

Throughout the year we have enjoyed close cooperation with the Public Relations Committee of the Medical Society and Mr. William N. Hilliard, Executive Assistant. At their request 18 counties have helped in the promotion of the High School Essay Contest held by the American Association of Physicians and Surgeons. Three counties gave awards to the local contest winners. Over 25,000 of the First Aid sheets originated and supplied by the Medical Society have been distributed by 22 Auxiliaries to 134 various organizations.

Our state organization has this year helped The Eye Bank for Restoring Sight, Inc., and the Florence Crittenton Home for unwed mothers in their educational drives. Two counties had programs on the Eye Bank and fifteen had programs on the Florence Crittenton Home. Seven Auxiliaries have contributed a total of \$119.44 to the Home and two were influential in having the Home included in the budget of their local Community Chests.

Radio And Movies

Eighteen counties report having used these media for their own local programs and 17 report distribution or recommendation of the material to other organizations. Subjects include Doctor's Day, Recruitment, Safety, Crittenton Home, Heart Forum, American Medical Educational Foundation, and one of the series from the A.M.A.

Recruitment

The field of Recruitment, broadened to stimulate interest not only in nursing, but medicine and its allied fields as well, continues to be among the most active of all Auxiliary projects. Forty-one Auxiliaries have organized and given counsel to 10 Future Nurses' Clubs. They have conducted 11

hospital tours. One Auxiliary had a total of 105 girls on their four tours. Fourteen county scholarships, fifteen county loans, one District scholarship, and one Past Presidents' scholarship are maintained throughout the State.

Research

Six counties have contributed to the Research program of the Woman's Auxiliary to the Southern Medical Association.

Rural Health

Working closely with Mrs. Annette Boutwell, Consultant on Rural Health for the Medical Society, our Chairman, Mrs. Robert N. Creadick, has instigated a long range program in the field of education for the public and physicians concerning the available health facilities. Increased activity was exhibited in the reports from 29 counties, with the promise of a great deal more to come next year.

Safety

Although no state chairman was appointed for Safety, four counties have had Safety programs and notices have been distributed through the President's January Letter and the Auxiliary News.

Sanatoria Beds

These state projects, first begun in 1928 with the McCain Bed, continue to receive the complete support of the organization. The Cooper, McCain, and Stevens endowments of \$10,000 each have been completed and the Yoder Bed Endowment is now \$5,000.00 in Savings Bonds. Forty-five Auxiliaries have contributed a total of \$957.40 for 1956-57.

Present occupants are:

Cooper—Miss Evelyn Marie Paul, 18, Student Nurse—Belhaven, N. C.

McCain—Miss Eleana Spence, Graduate Nurse—Goldsboro, N. C.

Stevens—Dr. H. T. Horsley—Franklin, N. C.

Yoder—Unoccupied.

Student Loan Fund

At present the State Auxiliary has granted four loans to medical students and interns for a total of \$1,725.00. The fourth loan was made in January 1957. An application for a fifth loan has been received from a student nurse. This is now under consideration, and will be granted if approved. This year Auxiliaries have contributed a total of \$357.50 to the Fund.

"Today's Health"

The chairman, Mrs. A. A. Mumford, reports total subscriptions to date of 679, an increase of 304 over the previous year. Lincoln, Stanly, Bertie-Hertford-Gates, and Richmond Counties have made the Exclusive Club in the National Subscription Contest. Columbus the More Exclusive Club.

Treasurer

No report would be complete without mentioning the tremendous job done by our Treasurer, Mrs. J. M. Hitch. In addition to her duties of handling the funds received from dues, the Bed Endowments, and the contributions to the Student Loan Fund, she has compiled an individual record for everyone who has ever been a member of the State Auxiliary since its origin in 1923. In order to complete this task it was necessary for her to borrow the bound copies of the NORTH CAROLINA MEDICAL JOURNAL to secure the Auxiliary rosters for each year from 1923.

Seventeen Auxiliaries had excellent yearbooks and 36 reported the appointment and use of an Advisory Committee from their local Medical Societies.

The Auxiliary, and in particular the President, is indebted to the Medical Society, its President, Dr. Donald B. Koonce, and the Executive Secretary, Mr. James T. Barnes, for their help, encouragement, and thoughtfulness throughout the year. Mr. Barnes and his staff prepared 250 copies

of the new Handbook, and also the annual reports.

The Executive Council of the Medical Society thoughtfully extended an invitation to the President-Elect, Mrs. Donnie M. Royal, to attend their September meeting when your President appeared before them.

Dr. Koonce, Mr. Barnes and Mr. William Hilliard of the Public Relations Department participated in the program for the fall Workshop. Mr. Hilliard spoke on publicity again at the meeting of the Third District in January.

Mrs. Annette Bontwell, Rural Health Consultant, has prepared much material for the Auxiliary's Rural Health Committee, and served as speaker for several Auxiliaries.

The Auxiliary Roster was published in the January issue of the NORTH CAROLINA MEDICAL JOURNAL, and the transactions of the 1955-56 annual meeting appeared in a special May supplement along with those of the Medical Society.

Dr. Koonce, Mr. Barnes and Mr. William Hilliard of the Medical Society a request from the Auxiliary for \$300 for the President and President-Elect to attend the National Conference of State Presidents and Presidents-Elect. The request was granted. The Society also contributes \$500 annually to the convention expenses of the Auxiliary.

Your President has attended the following meetings: The Annual Meeting of the Woman's Auxiliary to the American Medical Association; meetings of the Second, Third, Fourth, Sixth, Seventh, and Ninth Districts; Gaston, Forsyth-Stokes, Watauga, Lincoln, and Guilford counties; the Public Relations Conference of the Medical Society; the Southeastern Regional Civil Defense Conference; and the Annual Meeting of the Woman's Auxiliary to the Southern Medical Association.

Mrs. Harvey C. May
President

REPORT OF THE PRESIDENT-ELECT

The President-Elect has attended all meetings of the Executive Committee and the Board of Directors during 1956-57. She has used the year as a period of self-education in Auxiliary matters, and of becoming better acquainted with the state membership.

It has been her desire to work closely with the President in all matters, although distance has sometimes proved to be a handicap.

A calendar has been kept for the succeeding President-Elect.

At the direction of the President, the President-Elect complied with the request from the National Auxiliary to write a paper, which was given at the National Conference in Chicago in October 1956.

All of the committee chairmen have been secured with one exception, ready to begin work in May.

Mrs. Donnie M. Royal
President-Elect

REPORT OF THE FIRST VICE PRESIDENT AND CHAIRMAN OF ORGANIZATION

Significant advancement has been realized in organization with the addition of 6 auxiliaries; one by division, Watauga-Ashe; two by re-organization, Cleveland and Rutherford; and three by organization, Bladen, Stanly and Union. Seventy-five counties are working in fifty-six auxiliaries, Guilford working as two units.

Progress has been made in four other counties and the State Auxiliary looks forward with pleasure to receiving them into membership another year.

To date, our membership total is 2,200 as compared to 2,052 at this time last year.

First District has nine counties (one hundred per cent) organized into three auxiliaries with 39 members out of a possible forty-eight. Four meetings were held this year. One member-at-large.

Second District with eight medical societies has six auxiliaries composed of 9 counties with a membership of 132—an increase of 5. One meeting was held in November and one member-at-large.

Third District has five organized Auxiliaries—composed of 4 counties and one unorganized with a total of 120 members—an increase of 12. Bladen was welcomed into the District this year. It was my pleasure to attend the District Meeting in Jacksonville in February. One member-at-large.

Fourth District has six medical societies and six auxiliaries composed of 8 counties with 152 members, an increase of 2. Green County with only three doctors is unorganized but has 3 auxiliary members-at-large. A total of 6 members-at-large. The annual meeting was held in Wilson.

Fifth District has eight organized Auxiliaries—representing 8 counties—and one unorganized county with a membership of 193. An increase of 9. I was delighted to be able to attend the meeting in December in Fayetteville.

Sixth District has seven county medical societies with 4 auxiliaries—representing 4 counties; 8 members-at-large and 344 members. An increase of 29. I regret that I was unable to accept the invitation to attend the annual meeting.

Seventh District is happy to report the addition of 4 auxiliaries—Stanly, Cleveland, Rutherford, and Union, making a total of 8 with a membership of 403—including 9 members-at-large. The meeting was held in Charlotte in October.

Eighth District has seven auxiliaries representing 10 counties and one branch organization, Guilford; and one unorganized county. One district meeting was held. Four hundred eleven members including 6 members-at-large, an increase of 15.

Ninth District has seven county medical societies and five auxiliaries representing 7 counties with a total membership of 200, an increase of 15, and 12 members-at-large. One district meeting was held in this district.

Tenth District composed of twelve medical societies has three auxiliaries with 199 members—an increase of 53, including 22 members-at-large.

The District meeting was held in Asheville in October.

I wish to congratulate the councilors and county presidents for their excellent work and splendid cooperation. It has been a pleasure to work with them and to share their accomplishments.

Mrs. R. D. Croom, Jr.
First Vice-President

REPORT OF SECOND VICE PRESIDENT AND CHAIRMAN OF ACTIVITIES 1956-57

The Auxiliary has had the same five major projects as last year; namely, the Student Loan Fund and the four Sanatoria Beds. These activities have been under the capable leadership of the following chairmen: Mrs. Roscoe D. McMillan, Student Loan Fund; Mrs. Leonard E. Fields, Yoder Bed; Mrs. Paul W. Johnson, Stevens Bed; Mrs. R. A. Matheson, McCain Bed; and Mrs. Roland H. Vaughn, Cooper Bed.

Student Loan Fund: Mrs. McMillan reports that there are four loans, totaling \$1,725.00 now in use. Three of these loans are continuations of previous loans (see 1956 report). The fourth loan of \$500.00 was made in January 1957, to Mr. Norris Biggerstaff, Bowman Gray School of Medicine, Winston-Salem, N. C. Mr. Biggerstaff is a first year medical

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ACHROMYCIN V Capsules are
practically twice the absorption
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ACHROMYCIN V is now available in — **CAPSULES**. (Pink) 250 mg., 100 mg. (tetracycline HCl equivalents, phosphate-buffered.) **SYRUP**. Each teaspoonful (5 cc.) of orange-flavored syrup contains 125 mg. of tetracycline HCl activity, phosphate-buffered. **LIQUID PEDIATRIC DROPS**. Each cc. (20 drops) contains 100 mg. of tetracycline HCl activity, phosphate-buffered. (Approx. 5 mg. per drop). Orange Flavor. Plastic dropper-type bottle of 10 cc.

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PLANS AVAILABLE

<i>Accidental Death</i>	<i>Dismemberment Benefits, Up to</i>	<i>Accidental and Sickness Benefits</i>	<i>Annual Premium</i>	<i>Semi-Annual Premium</i>
\$5,000.00	\$10,000.00	\$ 50.00 weekly	\$ 90.00	\$45.00
5,000.00	15,000.00	75.00 weekly	131.00	66.00
5,000.00	20,000.00	100.00 weekly	172.00	86.50
		(\$433.00 per month)		

Members under age 60 and in good health may apply for \$10.00 per day extra for hospitalization at premium of only \$20.00 annually, or \$10.00 semi-annually.

FOR APPLICATION, OR FURTHER INFORMATION, WRITE OR CALL

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Professional Group Disability Division

Box 147, Durham, N. C.

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student. On February 9, 1957, a request for a loan of \$200.00 was received from a student nurse. This request is being carefully considered and will be granted, if approved. The total in the Loan Fund, including contributions, is \$1,545.33.

Yoder Bed: Mrs. Fields reports that the third guest since the establishment of the Yoder Bed was Mrs. Nettie Bolick, Rt. #1, Efland, N. C. This patient occupied the bed from February 1956, to November 1956. The fourth and present occupant of the bed, admitted in November 1956, is Dr. Hisashi Kajikuri of Japan, a surgical intern on the staff of the North Carolina Memorial Hospital at Chapel Hill, N. C. Mrs. Fields reports that the County Auxiliaries have responded well in remembering these patients. Our guests of this bed have been fortunate in having the State Chairman, Mrs. Fields, live in the town in which they are hospitalized. She and her husband have kept in close contact with the patients, visiting them frequently and taking gifts.

Stevens Bed: Mrs. Johnson reports that Dr. H. T. Horsley of Franklin, N. C., is the present occupant of the bed. He was admitted following the discharge of Miss Louise Ware, a Baptist Hospital nurse. Mrs. Johnson reports excellent response to the remembrance program from all counties. Several cash contributions and numerous gifts were received by the occupants of this bed.

Cooper Bed: Mrs. Vaughn reports that this bed has been occupied continuously except for the period of one month. Dr. A. H. Rose of Smithfield, N. C., was discharged on August 28, 1956. Miss Evelyn Marie Paul, a student nurse, of Belhaven, N. C., was accepted as a Cooper Bed patient early in October 1956, having been a patient at the Sanatorium since September 21st. Miss Paul is adequately covered by insurance for three hundred and thirty days, so the Auxiliary is not paying the hospital bill, but the various county units are carrying out the remembrance program. The Cooper Bed has been given two magazine subscriptions and the patients have received many personal gifts. The First District Councilor and the Cooper Bed Chairman visited the present occupant on February 4th.

McCain Bed: Mrs. Matheson reports that the McCain Bed was occupied by Mr. Vestal C. Taylor of Fayetteville, N. C., from May 13, 1956, until August 30, 1956. On September 8, 1956, Mr. N. F. Furmage of Parkton, N. C., became our guest. He is an ex-patient whose wife is Assistant Director of Nursing at McCain. He was discharged on January 12, 1957. Mrs. Eleana Spence, a graduate nurse, is the present occupant of the bed. It is anticipated that she will be hospitalized for approximately eight months. Mrs. Matheson has visited our guests frequently and reports that they have received two magazine subscriptions, cash donations, and many useful gifts from the County Auxiliaries.

The full reports of all five chairmen are on file and may be consulted for further details. Each chairman has expressed gratitude to the County Auxiliaries which have responded so well to the remembrance program.

Virginia Flowers Baker
(Mrs. Lenox D. Baker)

REPORT OF RECORDING SECRETARY

A complete record of the transactions of the Auxiliary to the Medical Society of the State of North Carolina was prepared and placed on file. Abstracts of the Minutes were sent to Auxiliary news for publication and a copy of the minutes was submitted to the Executive Secretary of the

Medical Society of the State of North Carolina for his files.

The Recording Secretary was unable to be present at the Fall Board Meeting and Workshop held at the Hotel Barringer in Charlotte on September 12, 1956. The minutes of the meeting were capably taken by Mrs. Joe M. Van Hoy as Acting Recording Secretary, and the proper distribution of all copies was made.

The Recording Secretary mailed a letter to each of the 27 living Past Presidents of the Auxiliary to the Medical Society of the State of North Carolina, notifying them of their one year appointment to a special Archives Committee under the chairmanship of the State Historian.

All correspondence and special activities requested by the President have been completed.

Mrs. Robert L. Garrard,
Recording Secretary

REPORT OF THE TREASURER

The Audited report of the treasurer's records for the year 1956-57 is submitted herewith, receipts and disbursements having been recorded and transactions made according to the By-Laws.

A membership of 2,200 has been reached, due to the excellent work of the county treasurers and the splendid results from the efforts of the First Vice-President, Mrs. R. D. Croom, Jr., in organizing five new county auxiliaries.

The "highlight" so far as the treasurer is concerned was the completion of the master file so that a record for each member, beginning with the year 1923 and concluding with 1957, is available in alphabetic order. This will be kept up-to-date.

Copies of the individual membership record will be given to each county treasurer so that she will have a complete record, showing the first year of payment of dues to the State Auxiliary and each year thereafter.

Honorary Membership was conferred upon Mrs. A. Byron Holmes of Fairmont, Mrs. E. Clarence Judd of Raleigh, and Mrs. William P. Knight of Greensboro. Life Membership was conferred upon Mrs. Alexander C. Bulla of Raleigh. Mrs. Robert L. Murray of Raeford, and Mrs. Paul A. Yoder of Winston-Salem. The State Auxiliary will henceforth assume the payment of national dues for these honorary and life members.

My special appreciation goes to our President, Mrs. Harvey C. May, and the Executive Board, as well as to each County Treasurer, for their splendid cooperation throughout the year.

My warm-hearted appreciation is also extended to Mr. James T. Barnes, Executive Secretary of the Medical Society, and to each member of his staff, whose ready response to every request for help has made this a wonderful year.

Mrs. Joseph M. Hitch
Treasurer

REPORT OF FINANCE COMMITTEE

The Finance Committee of The Auxiliary to the Medical Society of the State of North Carolina submits the following budget for 1957-58, based on collecting dues of \$2.00 from 2,000 members and the receipt of \$800.00 from the Medical Society (\$500.00 for Convention Expenses and \$300.00 for the National Fall Conference to be attended by the President and President-Elect):

Mrs. Donnie M. Royal,
President-Elect
Mrs. R. D. Croom, Jr.,
First Vice-President
Mrs. J. M. Hitch, Treasurer

Estimated Receipts

<i>General Fund</i>			
Balance 6-30-57	\$1,546.56		
National Dues	2,000.00		
State Dues	2,000.00		
National Fall Conference Expenses (Med. Soc.)	300.00	\$5,846.56	
<i>Sanatoria Bed Fund</i>			
Balance 6-30-57	\$ 500.00		
<i>Interest on U. S. Savings Bonds</i>			
Cooper Endowment Fund	\$ 276.00		
McCain Endowment Fund	317.40		
Stevens Endowment Fund	266.40		
Yoder Endowment Fund	138.00	997.80	1,497.80
<i>Convention Expense Fund</i>			
Balance 6-30-57	\$ 235.69		
Convention Expenses 1958 (Med. Soc.)	500.00	735.69	
TOTAL ESTIMATED RECEIPTS			\$8,080.05

Estimated Disbursements

<i>General Expenses</i>			
Audit of Treasurer's Books	\$ 75.00		
Bonding of Treasurer	50.00		
Convention Exhibit (See Convention Expenses)	--0		
Dues Woman's Aux., A.M.A.	\$2,000.00		
5 Honorary, 3 Life Members	8.00	2,008.00	
Miscellaneous		21.50	
Printing and Supplies		525.00	
Safe Deposit Box Rental		5.50	\$2,685.00
<i>Convention Expenses 1958</i>			
Convention Exhibit	\$ 15.00		
Memorials Chairman	20.00		
Special Entertainment of Invited Speakers	50.00		
Other Expenses	415.00	500.00	
<i>Officers' Expenses</i>			
<i>President (including Corresponding Secretary) A.M.A. Meeting (President or her appointed delegate)</i>			
	\$100.00		
National Fall Conference	150.00		
Other Expenses	250.00	\$ 500.00	
<i>President-Elect</i>			
National Fall Conference	\$150.00		
Other Expenses	50.00	200.00	
Chairman of Past Presidents		5.00	
First Vice-President		40.00	
Second Vice-President		10.00	
Recording Secretary		10.00	
Treasurer		175.00	940.00
<i>Committee Chairmen and Councilors</i>			
American Medical Education Foundation	\$ 15.00		
AUXILIARY NEWS	200.00		
Awards	5.00		
BULLETIN	5.00		
Civil Defense	5.00		
Councilors (\$15.00 each for 10 Districts)	150.00		
Councilor to the Southern (\$2.00 paid by S.M.A.)	--0--		
Doctor's Day	5.00		
Florence Crittenden Home	5.00		
Historian	50.00		
Legislation	25.00		
Memorials (See Convention Expenses)	--0--		
Mental Health (\$2.00 membership; \$18.00 chairman)	20.00		
N. C. Council of Women's Organizations \$5.00 donation; \$5.00 chairman)	10.00		
N. C. Family Life Council (\$10.00 dues; \$5.00 chairman)	15.00		
N. C. Health Council Dues	10.00		
Nominations	5.00		
Program	10.00		
Public Relations	20.00		
Publicity	20.00		
Radio and Movies	5.00		
Recruitment	10.00		
Research	5.00		
Revisions	10.00		
Rural Health	20.00		
Safety	5.00		
<i>Sanatoria Bed Chairmen</i>			
Cooper	\$ 5.00		
McCain	5.00		
Stevens	5.00		
Yoder	5.00	20.00	

Scrapbook	10.00		
Student Loan Fund	5.00		
TODAY'S HEALTH	10.00	675.00	

<i>Upkeep of Sanatoria Beds</i>			
Cooper (Wilson)	\$ 219.00		
McCain (McCain)	219.00		
Stevens (Black Mountain)	219.00		
Yoder (Chapel Hill)	219.00	876.00	

TOTAL ESTIMATED DISBURSEMENTS \$5,676.00
Reserve for Contingencies

<i>General Fund</i>			
Sanatoria Bed Fund (\$121.80 to be transferred to Yoder Endowment Fund in accordance with the By-Laws, Article VIII, Section 3b)	\$1,546.56		
Convention Expense Fund	621.80	235.69	2,404.05

TOTAL ESTIMATED FUNDS \$8,080.05

(Auditor's Report will be found on pages 397-399)

REPORT OF FIRST MEDICAL DISTRICT SECRETARY

During this year I have tried to accomplish whatever work the President has requested, whether it was Meeting arrangements, form mimeographing, addressing envelopes, organizing lists or letter writing.

Mrs. Kate B. De Camp,
Corresponding Secretary

REPORT OF FIRST MEDICAL DISTRICT

The nine counties of District One are one hundred per cent organized into three units, each one made up of two or more counties. We hold four regular District Meetings each year. The August meeting is traditionally held at Nag's Head. The other three meetings are held alternately at Elizabeth City, Ahoskie, Edenton, or Windsor; always on Wednesday evening. We have programs which consist of a social hour, dinner and program of interesting speakers. The Auxiliary are always the invited guests at these meetings. Attendance is always excellent, being enjoyable socially as well as professionally valuable. Each of the smaller groups has four meetings a year, which come between the districts meetings, and are used to transact our business. We usually have luncheon meetings with a program or bridge game after business is completed.

There are seven copies of the Bulletin subscribed. We have received an honorable mention for our Today's Health campaign, with a total of more than fifty subscriptions. We contributed twenty-three dollars to A.M.E.F. and ten dollars to the Student Loan Fund, eight to the Yoder Bed Fund.

Our Chowan-Perquimans unit, with only ten members, presented Radio skits on "The Importance of the Family Doctor" and "The Importance of an Annual Physical Check-up"; also a tape recorded program on the work of the Florence Crittenton Home.

All units were active in Nurse Recruitment; sponsoring career days, and distributing hospital information.

We were especially interested in Miss Evelyn Paul, our Cooper Bed guest. Besides the assigned hostess duties, we visited her at the Sanatorium, and several of us corresponded with her. We sent pajamas and a robe at Christmas time, books, candy, cookies, records and valentines at other times. She hopes to continue her career as a student nurse next fall.

Each of our units plans to celebrate Doctor's Day with a party and other special recognition.

Mary G. Brinn
Councilor, First District

(District Reports continued on page 400)

STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDED JUNE 30, 1957

EXHIBIT "B"

	General Expense Fund	Sanatoria Fund	Convention Expense Fund	Paul Yoder Endowment Fund	Student Loan Fund
RECEIPTS:					
National dues	\$ 2,202.00				
National dues—arrears	1.00				
State dues	2,203.00				
State dues—arrears	1.00			\$ 2.88	\$ 30.62
Interest on bank savings accounts					
U. S. Savings Bonds redeemed (cost):					
Stevens Endowment Fund		\$ 253.90			
McCain Endowment Fund		317.40			
Cooper Endowment Fund		276.00			
Yoder Endowment Fund		124.20			
Interest on U. S. Savings Bonds redeemed:					
Stevens Endowment Fund		1,000.00			
Interest on U. S. Savings Bonds held as investments:					
Stevens Endowment Fund		12.50			27.60
Student Loan Fund					
Transfer from:					
Sanatoria Fund				37.20	
Yoder Endowment Fund		500.00			
Student Loan Fund	500.00				
Medical Society Of The State Of North Carolina			\$ 500.00		
Mrs. Joseph McGowan			822.50		
Contributions				925.20	357.50
Pin for Mrs. McCain	6.00				
Total receipts	4,913.00	2,484.00	1,322.50	965.28	415.72
DISBURSEMENTS:					
National dues	2,200.00				
National dues—arrears	1.00				
N. C. Sanatorium, McCain		221.40			
Western N. C. Sanatorium, Black Mountain		137.40			
Eastern N. C. Sanatorium, Wilson		73.80			
Graveley Sanatorium, Chapel Hill		198.30			
Disbursements — (forwarded)	2,201.00	630.90			

EXHIBIT "B"
(Concluded)

Disbursements — (forwarded)	\$ 2,201.00	\$ 630.90	
Officers' and chairmen's expenses	831.40		
Auxiliary news	174.30		
Printing and supplies	413.22		
Auditing fee	75.00		
Safe deposit box rental	5.50		
Bonding of treasurer	50.00		
Intangible tax	3.00		
Bank service charge41		
Refund of overpayment of dues	8.00		
Dues to other organizations	55.00		
Pins for Past Presidents	221.20		
Donation for Past President	12.00		
Student loan:			
Norris A. Biggerstaff	500.00		
U. S. Savings Bonds purchased:			
Stevens Endowment Fund	1,000.00		
Yoder Endowment Fund	500.00		
Transfer to:			
Yoder Endowment Fund	37.20		
General Expense Fund		\$ 500.00	500.00
Sanatoria Fund			
Mrs. P. P. McCain	10.00		
Banquet tickets for guests		\$ 10.00	
Programs and ribbons		41.50	
Organist		20.00	
Banquet and tip		948.05	
Stamps and addressing cards		58.50	
Golf tournament expense		15.00	
Executive Board meeting refreshments		5.00	
Place cards		2.50	
Placards		12.00	
Flowers		70.30	
Total disbursements	4,560.03	2,168.10	1,182.85
RECEIPTS OVER/UNDER DISBURSEMENTS	352.97	315.90	139.65
CASH BALANCE—June 30, 1956	1,193.59	537.20	96.04
CASH BALANCE—June 30, 1957—Exhibit "A"	\$ 1,546.56	\$ 853.10	\$ 235.69
		\$ 489.64	\$ 1,566.80

REPORT OF SECOND MEDICAL DISTRICT

District #2 has 6 organized counties. Two counties are unorganized; one having only one and the other only four possible members. Due to the age of the majority of these possible members-at-large, they are disinterested. There is 1 member-at-large in District #2. Last year there were 127 paid members. For 1956-57 there are 132 members. There is an increase of 5 members.

One District Meeting was held November 29, 1956, at Morehead City, with approximately 25 members present. We enjoyed a most enlightening talk by our President, Mrs. May. I had the pleasure of attending the first meeting of the year of Lenoir County. This was held at Kinston.

Bulletin subscriptions increased 1; the total is now 17. Today's Health subscriptions sold 17, with no increase.

Contributions were as follows:

Yoder Bed	\$80.00
A.M.E.F.	65.00
Student Loan Fund	nil
Florence Crittenton Home	5.00

Sanatoria Bed guests were remembered with gifts, cards and money.

Public Relations were generally good. First Aid posters were distributed at book clubs and Armory. All drives were participated in. An effort was made by all counties to follow the State's outline as suggested.

Many various projects were undertaken and are excellent future working material. Pitt County has its Future Nurses Club, and are working on a Department of Nursing Education and Training for East Carolina College—a worthy project. Craven County is busy with Nurse Recruitment. Beaufort County is busy with Nurse Recruitment and Civil Defense work—they are plane spotting, and teaching courses in Red Cross and Civil Defense Nursing.

We are anticipating much activity in District #2 for the next year.

Mrs. W. C. Piver, Jr.
Counselor—Second District

REPORT OF THIRD MEDICAL DISTRICT

The Third District is proud of its newly organized county, Bladen, bringing its total to 5 out of 6 Auxiliaries, with a membership of 120 paid members, which is an increase of 12 over the past year.

As is the custom in the Third District, one District Meeting was held during this year. This meeting was held in Jacksonville, N. C., on February 1, 1957, with 41 present, including Mrs. Harvey May, Mrs. Donnie Royal, Mrs. Robert Croom and Mr. W. N. Hilliard.

As a whole, the Third District has continued to take an active part in Medical Auxiliary work, with an increase in the number of subscriptions sold, both to Today's Health and the Bulletin. Although we had a decrease in the contributions to the Yoder Bed, we had more than a 50 per cent increase in the Student Loan Fund and more than a 100 per cent increase in A.M.E.F. contributions.

All counties which had been assigned guests in a Sanatorium bed sent gifts throughout the year; five counties had advisory committees from their county Medical Society and five counties plan to observe Doctor's Day. Two counties distributed First Aid Posters and two counties set up Nurse Scholarships.

Since Bladen County Auxiliary is new, they have little to report except their organization, which includes appointment of committees to correspond with the State Committees, 100 per cent paid membership and plans to observe Doctor's Day.

Columbus County Auxiliary, active as always, has participated in various civic programs and has followed the suggested projects of the State Auxiliary. Their most outstanding accomplishment is their Nurse Recruitment program and a \$100.00 Scholarship.

Our Tri-County Auxiliary, New Hanover-Pender-Brunswick, has contributed to the various Funds of the State and National Auxiliaries and has taken an active part in all civic organization programs. Their outstanding contribution continues to be their financial and active support of the School for Handicapped Children and the local Salvation Army.

Onslow County Auxiliary, although small in number, is extremely active and enthusiastic. They have started holding monthly luncheon meetings with a planned program at each meeting. All members are active in Church and civic organizations and have taken part in all local and national drives. Their outstanding achievement was the planning and hosting a most delightful Third District Meeting, which was quite an undertaking for this small group.

Sampson County Auxiliary members, as well as the others in the District have been active in all civic projects, and Auxiliary projects. Their outstanding undertaking is the collecting and compiling of biographical data on all doctors who have practiced medicine in Sampson County. This will be printed in a booklet.

As Third District Counselor, I attended the Fall Board Meeting in Charlotte and have visited three of my county auxiliaries, keeping in touch with the other two by telephone and correspondence. My plans are to officially visit these two early this spring. I have attended all of the Bladen County Auxiliary Meetings, in order to help them organize and get started. I presided at our Third District Meeting in Jacksonville, prior to which, Mrs. W. W. Kitchin, appointed secretary for the Third District, and I had visited to plan the meeting. I have written to the Duplin County Medical Society asking permission to organize an Auxiliary and hope that in the near future I will be able to report that this is underway. My first year's work has been interesting and enlightening and I am looking forward to my second year with a great deal of pleasure. No District in the State could be more active, cooperative or enthusiastic.

Mrs. Amos N. Johnson
Counselor—Third District

REPORT OF FOURTH MEDICAL DISTRICT

The Fourth District is composed of nine counties. Green County, with only three doctors, is unorganized but has three auxiliary members-at-large. The other eight counties are organized in the six following auxiliaries: Edgecombe-Nash, Halifax-Northhampton, Johnston, Warren, Wayne and Wilson.

The Fourth District holds one District Meeting a year. The 1956 meeting was a luncheon meeting held at the Wilson Country Club on October 9th, the Wilson Auxiliary being hostess. Mrs. Harvey C. May, State President, our guest speaker for the day, gave us a very informative talk on Auxiliary work. Dr. Henderson Irvin, the Fourth District Counselor, was also our guest for the meeting. He brought us an encouraging message from the physicians of the District.

There were no subscriptions to the Bulletin this year, but we have forty-five subscriptions to Today's Health—an increase of two over last year.

The Fourth District contributed \$90.00 to the Yoder Bed Fund; \$15.00 to the Student Loan Fund and \$53.00 to A.M.E.F.

There is one \$300.00 scholarship, one \$155.00

plus scholarship and one \$300.00 loan fund without interest to a nurse taking training. Also, there is one Junior Aide program for high school girls. Twenty-five dollars was given to start a Commercial Dryer Fund for the Florence Crittenton Home Laundry.

The Fourth District Auxiliaries participated in the High School Essay Contest, distributed First Aid posters and Stop Rheumatic Fever pamphlets.

They have done splendid work helping with the T.B., Heart, Polio, United Fund and Educational Drives, and most of the members are active as Church, Woman's and Garden Club members. In the immediate future they will be busy helping the Doctors with the Rural Health meeting to be held in Wilson at the American Legion Hall on March 14th.

Edgecombe-Nash Auxiliary sent magazines, cards and bed jacket to the Cooper Bed patient, and a member will visit her each month. They maintain a Diabetic Detection Center. They entertained the Seaboard Medical Society and their wives at a tea and cocktail party; had a Christmas Party for the Medical Society, gave a tea in June to install the new officers, and will observe Doctor's Day by putting a red carnation on each Doctor's desk.

Halifax-Northampton Auxiliary sent the Cooper Bed patient a check for \$6.00. For Doctor's Day they are planning Radio spot announcements over the three radio stations in the area. Each member is urged to see that her husband receives a red carnation on Doctor's Day, because some members are not near a florist. They maintain a Junior Nurses' aid program for high school girls. As a result of the program last year, one girl plans to go into nursing.

Johnston County sent cards and a gift of \$5.00 to the McCain patient. They have worked with church and civic organizations, participated in all local charity drives and maintain a notion cart at the hospital. They were active in nurse recruitment, sending letters to all high school principals. They were invited to four of their schools, taking student nurses with them to create further interest. A series of thirteen radio programs from A.M.A. "Safe At Home" was sponsored and "Stop Rheumatic Fever" pamphlets were distributed to the members of the Junior Woman's Club. For Doctor's Day a card and a red carnation will be sent to each doctor, and red carnations will be put in the churches. All doctors with over forty years of service will be honored with a card on the hospital trays and radio spot announcements.

Warren County Medical Auxiliary is made up of nine members, the majority of which are elderly and without desire of active participation. They live in a rural area without the usual communications, etc. Realizing that their sphere of activity is limited, they voted to give their united support to the newly organized auxiliary of the local hospital as their project for the year. A Supper is planned to honor the doctors on Doctor's Day.

Wayne County Medical Auxiliary remembered the McCain patient with a subscription to the newspaper. They are actively supporting all local charitable and educational drives. A scholarship is being given to a student nurse at Mercy Hospital Charlotte, N. C. Wayne is the only auxiliary in the Fourth District that has a yearbook. Doctor's Day will be observed with radio and newspaper coverage, and new books are being added to the Doctor's library at the county hospital each year.

Wilson County Medical Auxiliary remembered the Cooper Bed patient with a Valentine gift to be followed by a gift in June. Book carts are maintained in three hospitals. A nurses' scholarship

is given in the Wilson School of Nursing, and \$25.00 was sent to the Florence Crittenton Home, to start a fund to buy a drying machine for their laundry. A dinner will be held at the Wilson Country Club for the doctors on Doctor's Day. Each year they give a party for the Freshman Class of the Wilson School of Nursing.

Green is unorganized, but the doctor's wives are busy with local activities and are 100 per cent members-at-large.

The Rachel Davis Cup—our permanent trophy—was awarded to the Halifax-Northampton Auxiliary for the most outstanding work of the year.

The Auxiliaries have held from two to four meetings a year. Some have followed the State Auxiliary outline more closely than others, but as I work with each Auxiliary, I have a very keen feeling that they are doing well the things that will help the doctors most in their community.

As Councilor of the Fourth District, I shall rejoice in rendering even greater service next year.

Mrs. E. L. Strickland,

Councilor—Fourth District

REPORT OF FIFTH MEDICAL DISTRICT

The Fifth District of the Medical Auxiliary has shown an increase in membership and interest in Auxiliary work this year. We now have 195 members, with Cumberland County having the most—57. Chatham County remains unorganized. Membership-at-large invitations were sent to wives of doctors in this county. Our District Meeting was held in conjunction with the Medical Society in Fayetteville on December 1, 1956. The Cumberland County group was hostess for the meeting, which was followed by a lovely tea and bridge. Our First Vice-President, Mrs. R. D. Croom, Jr., met with us. At the meeting, a nominating committee was appointed to secure a successor for the office of District Councilor. Later, we joined the doctors for a social hour and dinner.

Our Financial Report is incomplete, but so far, the Yoder Bed Fund shows a 65 per cent increase over last year with \$61.70 reported. \$27.50 was given to the Student Loan Fund, and \$80.60 to American Medical Education Foundation. Seven Auxiliaries have remembered the occupant of the McCain Bed, while one the Yoder Bed, with donations of gifts; namely, stationary, toilet articles, robe, book, candy, flowers, magazine subscription, and visits. One hundred twelve subscriptions to Today's Health were sold, showing a great increase. One county has a yearbook. Two counties have used radio and movie material in their programs. All Auxiliaries have participated in the campaign for Nurse Recruiting, with one county having an active Nurse's Scholarship.

Doctor's Day activities have been planned in each county. The programs have had a wide range of interest. Flowers were sent to doctors' offices, publicity given in newspapers, window displays arranged, and dinners and entertainment were held. Special note of the day was made in church services, and notes were placed on trays of hospital patients, telling of the meaning of Doctor's Day.

All Auxiliaries have reported great activity among doctor's wives in all medical and civic drives, community projects, and church work. Many Auxiliaries have made outstanding accomplishments during the year. Scotland County has had a stimulus of interest in auxiliary work by having monthly luncheon meetings, instead of bi-annual meetings. A Health Forum for the public is sponsored each year by them, which is wonderful public relations activity. Robeson County has furnished and totally equipped a Pediatric Playroom in the new wing of the Robeson County Hospital. Cumberland and Lee County Auxiliaries have done an

excellent work helping with the School for the Handicapped Children. Richmond County Auxiliary has drawn up and established a set of By-Laws. Scotland County has donated a record player and records to the Pediatric Ward of the Hospital.

Serving as Councilor of the Fifth District has been a rewarding experience for me, and I extend to my successor, Mrs. Z. F. Long of Rockingham warmest wishes for a successful tenure of office.

Mrs. J. S. Hiatt, Jr.
Councilor—Fifth District

REPORT OF SIXTH MEDICAL DISTRICT

It has been a joy to serve as Councilor in a District where doctors' wives are as active in civic organizations as well as in Auxiliary work as they are in the Sixth District. Good Public Relations must be well established in every strata of Society because service has been unselfishly rendered to every age group and according to various needs as for instance vaccinations and tests to school children; Art Lectures for the general public for leisure hours.

During the past year this Councilor has contacted all the organized Auxiliaries several times by phone, by Government postal cards for reminders of work, and by written and voiced requests for invitations to visit. Unorganized counties have been contacted and requests made for invitations to meet with doctors' wives. The Councilor to the Sixth District Medical Society has been asked for help in interesting organized and unorganized counties in Auxiliary work.

Our President, Mrs. May, has been complimentary of the Sixth District for the amount of effort that has been expended in the interest of our Auxiliary. It is regrettable that some of our counties do not give credit to our Auxiliary for their work in other organizations as they might if they were members. To compensate the organized Auxiliaries have reflected glory on the Sixth by their overwhelming zeal.

Alamance-Caswell was hostess to Sixth District Meeting in October. The occasion was most pleasant and profitable. Bridge and golf, with many lovely prizes, was enjoyed in the morning preceding the business meeting. Luncheon was as beautifully served as it was delicious, and the business session was highlighted by an instructive address from our State President. As a further reward for attendance, a short course in Parliamentary Procedure was charmingly taught by an accredited teacher.

There are seven medical societies and 4 auxiliaries. Eligible wives are 432, paid members 344.

Contributions are: Yoder Bed \$67.00. A.M.E.F. \$108.00; Student Loan \$30.00; 41 subscriptions to Today's Health.

Nurse Recruitment has been stressed, talks have been made to High School Students; Scholarships and Loans are available and being used. First Aid Posters have been distributed in Schools. The Yoder Bed occupants have been well remembered.

Program topics have been excellent on Auxiliary projects, etc. Community service has been too numerous and varied to be listed in this brief report.

Work in behalf of our Auxiliary will not stop for this year with this report. Two of our County Auxiliaries have been delayed in their work because of sickness and loss of loved ones. By the time of our annual meeting, the Sixth hopes to have a fuller report.

Mrs. C. T. Wilkinson
Councilor—Sixth District

REPORT OF THE SEVENTH MEDICAL DISTRICT

Seventh District is happy to report the organization of 4 new Auxiliaries: Stanly, Cleveland, Rutherford and Union Counties. These brought in

approximately fifty new members in all. Each doctor's wife in the unorganized counties (3 remain) has been written a letter, and it is hoped that before long these shall join the ranks of organized auxiliaries. Dr. Leslie Morris, Councilor for Seventh District urged the Medical Societies to help the Auxiliaries become organized. This seemed to help the cause in our District. We now have a total membership of 403 as compared to 299 last year.

The District Meeting was held in Charlotte October 24th at the Hotel Charlotte in connection with the District Medical Society Meeting. A business meeting was held at which time plans were outlined by the Presidents of the organized Auxiliaries. Mrs. Harvey May, State President, spoke on "The Purposes of the Auxiliary." Afterwards, the Mecklenburg County Medical Auxiliary graciously entertained the ladies with a bridge party at the Myers Park County Club.

Our over-all subscriptions remained about the same to the *Bulletin* and *Today's Health*. However, Gaston County had an increase from three (3) to fourteen (14) subscriptions for the *Bulletin*; Lincoln County, an increase from five (5) to seventeen (17) *Today's Health*.

Mecklenburg County Auxiliary had a Student Nurse's Loan Fund of \$250.00. Forty (\$40) dollars was donated to the Student Loan by 3 Auxiliaries. The Yoder Bed received \$85.00 from four Auxiliaries — Mecklenburg, Cleveland, Cabarrus and Lincoln. One hundred sixty-eight dollars was contributed to A.M.E.F. These figures will probably increase as our 4 newly organized Auxiliaries become more familiar with the Auxiliary activities and projects. Cleveland County contributed to the Yoder Bed and A.M.E.F., but a report on contributions was not received in time from Stanly and Rutherford County. The latter was organized in February, and was up against an impossible deadline.

Three counties participated in the High School Essay Contest. Mecklenburg and Gaston Counties announced it in the schools, and Cabarrus County Auxiliary gave a local award. (Gaston County Medical Society gave a \$25.00 award.)

Auxiliary members were active in all phases of community life, making for good public relations; especially, in the following: Red Cross, Heart, March of Dimes, and Cancer Drives, Civil Defense, P.T.A., Girl Scouts, United Appeal, Junior Women's Club, Junior League, YWCA and Church Work.

The three new Auxiliaries did not organize before the lists for "Sanatoria Bed Guests Remembrances" were compiled. However, Mecklenburg, Gaston, Cabarrus, and Lincoln remembered the guests with cash donations and personal gifts.

For Stanly, Cleveland, and Rutherford Counties, the outstanding achievement was becoming organized.

Cabarrus feels she has taken strides forward with better programs, excellent attendance, and a spirit of cooperation in all projects undertaken.

Gaston County has been particularly pleased with her program on public relations. Due to increase in new members, (and, to remind old members) orientation on the history, organizational structure, services, contributions, and how the Auxiliary serves as a vehicle in public relations seemed important and timely.

Lincoln County feels the Mental Health Program put on through the schools, in cooperation with P.T.A., was her outstanding accomplishment. Dr. N. E. Nelson, doctor of Psychology, gave a talk on "School for Handicapped Children and Young Adults" at Elementary School, and a lecture was given to the public. Dr. Marshal Fisher, President of North Carolina Mental Health Society,

gave four lectures to parents and teachers on "Effect of Discipline on Mental Health of the Small Child."

Mecklenburg County Auxiliary has had increased attendance at monthly meetings and better public relations; newspaper publicity, radio and television programs have been given a better precedence. The programs have been excellent.

It is difficult to say just where the greatest achievements have been made. As councilor, I feel much has been accomplished in Seventh District this year. I have visited Mecklenburg, will visit Gaston in April, visited Cleveland, and attended my own Auxiliary—Lincoln County. I regretted I was unable to accept Mrs. Noel's invitation to visit Cabarrus. In Seventh District we have the largest Auxiliary, Mecklenburg (206 members) and some of the smallest ones: Lincoln (12 members), Rutherford (18). It is interesting to observe each Auxiliary tackle her individual problems, and solve them in a satisfying way.

Mrs. James H. Reinhardt,
Councilor—Seventh District

REPORT OF THE EIGHTH DISTRICT

The Eighth District Medical Auxiliary held its annual meeting in Winston-Salem in November. Tea was served by our hostess group, the Forsyth-Stokes Auxiliary, to many interested and enthusiastic members. We later joined the doctors for a social hour and dinner.

From reports sent in, the Public Relations activities are many and varied. Doctors wives in each county are taking part in all phases of community work. One Auxiliary reported allocating an extra \$100.00 for the Doctor's Library in High Point Memorial Hospital. Another voted to raise dues in order to give more generously to local and state projects.

It was decided unanimously to continue to use the scholarship money for a second year medical student.

The Guilford Auxiliary still reports the largest membership, with 166 members. The total membership reported for the Eighth District is 369, but as two counties failed to send in a membership report, this number is incomplete.

Several counties have reported an increase in membership, and increased interest in the projects and aims of the Medical Auxiliary.

One of our smaller Auxiliaries has reported having quarterly meetings, instead of once or twice a year, as they had in the past.

Two hundred forty-five dollars was contributed to the Yoder Bed Fund. One hundred ten dollars to the Student Loan Fund, and \$170.00 to the American Medical Education Foundation.

All but one Auxiliary reported taking part in the Nurse Recruitment campaign.

Doctor's Day was observed by all counties in varied ways. Flowers were sent to the doctor's offices. Editorials were written in the newspapers. Dinners were held—a full page of pictures and interesting activities of the more private side of a doctor's life was published in a local newspaper.

The Forsyth-Stokes Auxiliary gave the doctor's a country party with appropriate costumes and square dancing.

Five counties are now publishing yearbooks. One county publishes a yearbook every other year. The Forsyth-Stokes Auxiliary has continued to put out a newsheet, which has been most interesting and informative.

The reports from the Eighth District have been excellent. They show an active and interested group.

Due to the fact that your Eighth District Councilor took over her duties late in the year, plus a

prolonged attack of that demon bursitis, I feel that she has been a total loss to this district. I sincerely hope that this next year she will exercise her duties more faithfully, and that each President of each Medical Auxiliary in the Eighth District will know and have more contact with her Councilor.

Thank you for the privilege of serving in this capacity. I shall be looking forward to really working with you this next year.

Mrs. William D. Wylie
Councilor—Eighth District

REPORT OF NINTH MEDICAL DISTRICT

District Nine is composed of seven counties, five organized, two unorganized, with a total membership of 200. There were seven members-at-large last year, and 12 in 1956-57.

Our Annual District meeting was held in September in Statesville with Iredell-Alexander members as hostesses. About 30 or 40 members braved the elements to attend the business meeting and hear a talk by Mrs. Doris Waugh Betts, a former Statesvillian who is a writer. The business meeting and program were followed by a social hour and banquet.

There have been no reports on subscriptions to the Bulletin; 28 subscriptions to Today's Health, which is no increase.

There were no reports on contributions to the Student Loan Fund or the Yoder Bed Fund, but the A.M.E.F. has reportedly received \$100.00. Three counties, Burke, Catawba and Caldwell have nursing scholarships, with two nurses already graduated and four in training now.

As to Public Relations—only one county has sponsored the Essay Contest and one distribution of First Aid posters, but all report participation in various community activities, such as Cancer, Heart, Polio Drives, Blood Bank work, P. T. A., Red Cross and welfare groups. Two counties are working with the Mental Health Committee.

Three counties sent gifts to the Stevens Bed patient, one to Yoder patient and all report sending greeting cards, etc., at various times. Four counties have shown much interest in the work of Florence Crittenton Home, having speakers and planning to help in some way, and five counties report special observance of Doctor's Day.

Mrs. Wm. Long
Councilor—Ninth District

REPORT OF TENTH MEDICAL DISTRICT

The three auxiliaries of the Tenth Medical District (Buncombe, Haywood, and Henderson) during 1956-57, enrolled 177 regular members and 22 members-at-large. The at-large category is a definite result of the effort made last spring to activate this aspect of our potential. A number of these at-large members attended both the annual District meeting in Asheville in October and also the 10th District Rural Health Conference held in Waynesville later in the fall. This we consider gratifying, since the sparse population and difficult driving conditions in our mountainous area distinctly limit the possibilities for organizing county auxiliaries on any wide scale. Several of these-at-large members plan to attend the state meeting in Asheville in May.

Interest in the Stevens Bed at WNC Sanatorium continues, with visits each month to the occupant and gifts at holiday seasons. The Student Loan Fund, the A.M.E.F., and Today's Health, were again subscribed to. Good public relations were fostered by an attitude of cooperation and goodwill on the part of doctor's wives in their communities through participation in such community efforts as the mass polio drive, the Home and Farm Safety Fair, the Rural Health Conference, the United

Fund, Red Cross, Blood Bank drives, etc. To this can be added the heartening fact that a number of doctors' wives have been serving as presidents of other service groups such as the PTA, AAUW, School Board, etc.

Doctor's Day was most brilliantly observed this year by Buncombe, Asheville being our one sizable city and, therefore, able to accomplish more than the smaller ones. Coffee was served to the doctors in the hospitals; the Mayor of Asheville proclaimed March 30th publicly as Doctor's Day; two department stores had related window displays and mentioned doctors in their advertisements that day; some of the city's churches not only mentioned the Day in bulletins and sermons, but also had flowers in memory of deceased doctors of the congregations; there was also newspaper and radio publicity.

Also, Asheville organized three Future Nurses Clubs in three of the High Schools; the clubs meet each month to hear speakers, see movies, make field trips—all treating allied material of interest to such a group; and the hospitals co-operated in allowing the young members to help out in Pediatric Wards on weekends.

Mrs. Curtis Crump

Councilor—Tenth District

REPORT OF AMERICAN MEDICAL EDUCATION FOUNDATION FUND

It is with pleasure that I submit the 1956-57 annual report for your consideration.

To date, contributions to the Foundation amount to \$880.80 which represents forty-one county auxiliaries. Five counties have increased their contributions over last year and seven counties have decreased their amount. Twenty-three counties duplicated their previous contributions and three counties made their initial contributions. One county sent a memorial donation. Three counties donated to A.M.E.F. in observance of Doctor's Day and I have been notified by others that expect to do the same. Three counties have presented A.M.E.F. programs.

From all indications, county interest in the American Medical Education Foundation has fallen off considerably, although the need for support has increased.

My sincere thanks to the many county A.M.E.F. chairmen and county presidents for their constant efforts to make this project a success.

Mrs. James T. Littlejohn,

Chairman

ANNUAL REPORT OF THE AUXILIARY NEWS

Three issues of The Auxiliary News have thus far been prepared. With the help of faithful reporters, councilors, officers, committee chairmen, the past editor, and the President, the editor was able to assemble the news for publication by the Public Relations Staff at the Hospital Saving Association in Chapel Hill. Two staff members there worked on the News this past year: Mrs. Gloria Resch Cooke and now Mrs. Keen O'Sullivan. They deserve a great deal of thanks from the Auxiliary.

The costs for mailing and editing The Auxiliary News are as follows:

Summer Issue	\$31.35
Fall Issue	31.95
Winter Issue	33.90
Spring Issue (estimated)	40.00
Cuts	
\$ 5.70 actually spent	
\$11.40—estimate for 2 more	17.10
Extra printed copy	11.00
Postage and Telephone	3.50
	<hr/>
	\$168.80

Mrs. William S. Joyner,
Editor

REPORT OF BULLETIN

1956-1957

The Bulletin this year appeared in an attractive new cover and is more informative and interesting than ever before. In order to familiarize more members with this handbook for doctors' wives, a flyer is being published and will be available soon.

Thirty members served the local auxiliaries as Bulletin chairmen. Thirty-two reports were submitted. National records show only fifty subscribers to the Bulletin from North Carolina.

Mrs. L. Everett Sawyer,
Chairman

CIVIL DEFENSE REPORT

1956-57

On May 9-10, Mrs. Harvey May, Auxiliary President to the State Medical Society attended the conference of Women Leaders in Charlotte. The purpose of this meeting was to give women leaders the latest and best civil defense information by top-ranking specialists in the field.

This has been suggested for county and local programs, and reports have been most encouraging.

There were 12 counties to give special programs on civil defense. One hundred-sixty four women participated as volunteers, doing sky watching, welfare work, and one day each week to the blood-mobile.

Over three hundred-fifty women did work in specific civil defense projects, such as ground observer corps, first aid, home nursing, mass feeding programs, distributing pamphlets on atomic radiation, Grandma's Pantry, etc.

All counties could not be expected to have programs on civil defense and owing to the various sizes, all auxiliaries could not be expected to participate in all of the programs offered by the program Chairman. But, we are becoming more aware of need of preparation, whether it be from fire, water, wrecks, hurricanes or atomic.

We hope to be more prepared to participate in NATIONAL CIVIL DEFENSE WEEK and plan some special celebration for this week, honoring those who take part in civil defense activities and those having done outstanding work in the past.

We plan to continue the participation in the Emergency Food Storage Plan, and to help place a First Aid Kit in every member's home and car.

Mrs. James W. Rose,
Chairman

REPORT OF HISTORIAN

The report of the Historian for this year covers two phases of Auxiliary information—that of the new Archives Committee and also that of the Auxiliary in general. Fifty per cent of the county auxiliaries reported by February 18, 1956; therefore, this is based on that information.

On September 12, 1956, at the Fall Board meeting of the State Auxiliary in Charlotte a special Archives Committee was established to serve for one year. This Committee was made up of the President, the twenty-seven living Past Presidents and the incumbent Historian, with the Historian as Chairman. The purpose of the committee was to go through the accumulated boxes of material from past years; to eliminate the unnecessary material and to reorganize and file properly all important records and documents.

A meeting of this Archives Committee was held January 16, 1957, at the residence of Mrs. Harvey May, the State President, in Charlotte. The special

assignment of systematizing the records was accomplished. The existing records are now condensed and filed to make them more accessible for later reference. This was done with a two-fold purpose in mind. First, in order that the History, which is to be written in 1957, of the entire life of the Auxiliary, might be more easily compiled and secondly, that the important records and documents would be more orderly and ready for filing when the Archives space is available in the future building of the State Medical Society in Raleigh.

A questionnaire type of report used, for the first time this year, by the county organizations has proven quite useful for the acquisition of factual information and the compiling of this summary report. The details of the reports are being kept for future reference.

This year the State Auxiliary has four new county organizations; namely, Stanly, Cleveland, Bladen and Rutherford. We now have a total of fifty-five organizations representing seventy-five of the one hundred counties in the State. The total paid membership is 1,940 as of February 15, 1957.

Statistical information from 27 county reports available as of the dead-line for this report shows that out of a possible membership of 1946 in this group there are 1423 members. This is an increase of 24 members for the same group over that of last year. These 27 county organizations contributed \$559.00 to the American Medical Education Fund in 1957, which is a decrease of \$451.00 from 1956. 551 subscriptions to *Today's Health* and 67 to the "Bulletin" were accounted for by these groups. The 27 groups have contributed \$645.00 to the Yoder Bed Fund and \$157.50 to the Student Loan Fund. Eleven of the 27 groups locally sponsored the National Essay Contest and the same number assisted with the Rural Health Program and the Florence Crittenton Home Program. Thirteen of the reporting groups participated in the Civil Defense Program while eleven groups have made contacts regarding Legislation. Two groups advise that a Research Report was made. Eight of the larger organizations have prepared attractive and informative year books.

From the questionnaires completed by those 27 Auxiliaries reporting it was noted that only one project was supported by every group. This item was "remembering of the occupant in the assigned T. B. sanatorium bed". The next greatest participation was in the "Observance of Doctor's Day", twenty-six out of twenty-seven societies reporting have made definite plans for Doctor's Day 1957. Twenty-three groups are active in the Nurse Recruitment Program. Six of the twenty-three groups are financially sponsoring a total of seven student nurses, now receiving their training. In addition to the seven, three other Auxiliaries—Watauga, Wilson and Robeson have established a scholarship for a student from their respective counties beginning this year.

Three organizations, of the twenty-seven reporting, have adopted a new constitution and by-laws. As a result of this they feel that their scheduled meetings have been more interesting and that better attendance has been noted.

In summary, the outstanding achievements for the group as a whole, although they vary, can be listed as better public relations acquired through the varied projects such as the Nurse Recruitment Program, the Mental Health Programs and Clinics, the hospital book and notion carts and the work with handicapped and retarded children. By joint sponsorship with certain civic groups many other worthy projects have been completed. Excellent use of radio and television media, where it is

available, has been made. Newspaper coverage has been much improved over last year.

Mrs. Frank W. Jones
Historian

LEGISLATION REPORT 1956-57

The "American Medical Association's News Letter" which is published weekly, was received by 54 Auxiliaries, either by the Legislation Chairman or the County President. 27 Auxiliaries have reported to date.

Guilford-Greensboro Branch had for the speaker at one of their monthly meetings Mr. William Snyder, Editor of the Greensboro Daily News, who spoke on "Politics Today" with particular emphasis on political relations to medicine.

Watauga County circulated the "A.M.A. Washington News Letter" among its members and sent wires and letters to their Representatives when necessary. Alamance-Caswell allotted time for important legislation to be brought to their attention during the year. They were informed on the candidate running for office and urged to vote.

Chowan-Perquimans had legislation concerning the medical profession discussed and wired the Representatives and Senators when advised to do so.

Haywood had a planned program on Legislation and discussion of bills took place during other meetings.

Robeson, Pitt, and Gaston counties planned a complete program on Legislation during the year. Their Legislation Committee was very active, informing their group of all bills of interest to the medical profession and they took positive action with telegrams and letters to Congressmen.

Rowan-Davie members were informed through the year by the "A.M.A. Washington News Letter" and are planning a program during the year.

Scotland, Forsyth-Stokes and Mecklenburg each had a program on "The Doctors' Insurance Plan". Dr. V. K. Hart gave the program in Mecklenburg, Dr. Roscoe D. McMillan presented the Scotland county program, and Dr. H. H. Bradshaw spoke to the Forsyth-Stokes Auxiliary.

Besides having one program dedicated entirely to Legislation Forsyth-Stokes kept their members who were absent from monthly meeting informed through their "News Letter," published monthly by the Auxiliary.

Lincoln, Ashe, New Hanover-Pender-Brunswick, Hoke, Carteret, and Iredell-Alexander informed their members through the A.M.A. News Letter. Durham-Orange, Lee, Harnett, Bertie-Gates-Hertford, Sampson, Richmond, Warren, and Wilkes-Alleghany made a report, but expressed no action taken on Legislation.

In cooperation with the Public Relations Committee of the Medical Society 18 Auxiliaries promoted the high school essay contest sponsored by the American Association of Physicians and Surgeons. The choice of topics for 1957 was either "The Advantages of Private Medical Care" or "The Advantages of the American Free Enterprise System".

At the meeting of the Board of Directors and Workshop held in Charlotte on September 12, 1956, Dr. Cyrus H. Maxwell, Assistant Director of the Washington Office of the A.M.A., presented an address "The Washington Scene".

During the year Mrs. Harvey May, State President, emphasized the importance of study and participation in a legislative program when visiting the Districts and counties.

The Southern Regional and National Reports have been sent in as requested.

Mrs. Lewis McKee
Chairman

MENTAL HEALTH REPORT

The Mental Health reports show an increase of interest and more diversified activities than heretofore. A trend to develop continuous program begins to be evident. Communities without Mental Health resources are becoming active. Several auxiliaries plan to initiate Mental Health activities next year.

Total number of county Mental Health Chairman—29—an increase of 10.

Mental Health Chairmen reporting—15—of which 2 report no activity.

Auxiliaries with no chairmen reporting—9—of which 5 report no activity.

Eight auxiliaries have devoted meetings to Mental Health. Topics included: "Preventive Measures and What the Auxiliary Can Do For Mental Health", "The Mentally Retarded Child", "Psychological Services, State and Local", "The Mental Health Clinic—Present Status and Future Plans", "Effect of Discipline on the Mental Health of Small Children"; "School for Mentally Handicapped Children and Adults"; "Increase of Psychiatric Courses Required for Medical Students"; a skit on old age problems "The Joint Owners in Spain".

Four auxiliaries have promoted "Milestones for Marriage".

Six auxiliaries have formative plans for Mental Health Week which will include a poster display in cooperation with the school's Art Department, an auxiliary speaker, a radio program, a TV panel on teenage problems, and exhibits in schools and libraries.

Four auxiliaries studied the needs of psychotic children and the existing facilities for their care.

Two auxiliaries gave direct financial support to a school for retarded children and a clinic building.

Five auxiliaries have obtained speakers for other organizations including a talk to a Senior Girl Scout troop on "Careers in Mental Health".

One chairman is teaching a six week course at the YWCA on "Some Positive Concepts of Marriage and Parenthood".

One chairman has talked to five book clubs on various phases of Mental Health with the result that one of the clubs has devoted the entire year to the study of Mental Health, and thirteen books have been donated to the public library.

Two auxiliaries are participating actively in the groundwork effort to obtain community interest and financial support for the purpose of establishing local Mental Health Clinics.

One Auxiliary is working with the Juvenile and Domestic Relations Court to establish a "Big Sister" organization to combat juvenile delinquency.

Many auxiliary members serve on boards of directors; are members of the state and/or local Mental Health Associations; give volunteer service to clinics, in hospitals or schools for mentally retarded children; attend meetings, lectures or institutes.

This year the Mental Health Committee of the North Carolina Medical Society has appointed Dr. Wilmer Betts of Raleigh to act as liaison officer between its committee and the Mental Health Committee of the Auxiliary. At present plans are being formulated to assist with certain legislation and appropriations to be considered by the 1957 State Legislature and to survey the usage of psychiatric beds in general hospitals in North Carolina.

Mrs. James B. Lounsbury
Chairman

REPORT OF PROGRAM COMMITTEE

The reports of the Program Chairmen of the County Auxiliaries were very enlightening. Thirty-seven out of fifty-four counties reported, nine of whom didn't have programs for one reason or another. The most popular topics for programs were: Florence Crittendon Home (13); Civil Defense (8); Rural Health and/or Safety (9); and Mental Health (8). Other subjects chosen included North Carolina Medical Insurance Plan, Legislation, Cancer, Nurse Recruitment, Heart, Rehabilitation, Public Relations, Tuberculosis, *Today's Health*, Diet, and A.M.E.F. Many auxiliaries meet strictly for social gatherings or largely for this purpose.

Do save your Program Outline for 1956-57 to be used until the new one comes in September. Often they contain a subject of interest that was not covered the year before for lack of time.

Most Auxiliaries have programs on a local problem or interest which is fine, but may I suggest that you have at least two on some phase of State Auxiliary interest. It seems to me that this would serve to broaden the membership and interest them in Auxiliary as a whole. It should be an important part of our life as it affects it in so many ways.

Thank you all for your cooperation and especially your promptness in the last two years. It has made my job so much easier and pleasanter. May you have a very rewarding 1957-58.

Mrs. Robert W. King
Chairman

REPORT OF COMMITTEE ON PUBLIC RELATIONS

After the 1955-56 annual report was made in February, 1956, Mrs. R. D. Croom and the Public Relations Chairman compiled a list of "WHO'S WHO IN MEDICAL AUXILIARY," which was mailed to the National Auxiliary for judging.

It is estimated that 82 per cent of the members of the North Carolina Auxiliary participated as individuals in civic projects such as health drives including Polio, Red Cross, Heart, Community Chest, Cancer, Chest X-Rays, Blood Banks and Bloodmobiles and Public School Clinics. They have served as Gray Ladies and Scout Leaders, and have been active in Hospital Auxiliaries, P.T.A., Service League, Sunday School and Church, League of Women Voters, A.A.U.W., School Boards, Libraries and City Planning Councils. Members who are nurses and physicians aided in the campaign against polio by giving inoculations in schools and business organizations.

As organized units at least two auxiliaries have conducted a "Diabetic Detection Survey" in cooperation with the local Medical Societies, given assistance and served refreshments in orthopedic clinics, made dressings for cancer clinics, helped the Medical Societies in holding Medical Symposiums and made cash donations to Nurse's Homes. Nine counties presented subscriptions for "Today's Health" to schools. One county gave "Today's Health" to the public library and others contributed material on medicine and memorial gifts. Auxiliaries have representatives from their organizations on the Community Council, Salvation Army Board and the Board of the School for Handicapped Children.

In connection with the Civil Defense program the counties have members acting as plane spotters and teaching courses in Red Cross and Civil Defense nursing.

In local hospitals members have served as volunteer workers, three maintain lending libraries in hospitals and two provide books and notions carts. They have also maintained a snack bar, furnished and equipped a pediatric playroom, donated a record

player and records to the pediatric ward and held a Christmas party for the patients in the Veterans Hospital.

Four Auxiliaries have donated time, material and money to schools for retarded children. Other cash donations have been given to the Public Health Department, Orphanage, Salvation Army Home and the Alexander Home for emotional disturbed children. One Auxiliary donated their time as nurses and clerks to the Public Health Department. Seven Auxiliaries have contributed a total of \$80.00 to the Crittenton Home for unwed mothers and Wilson and Alamance-Caswell have been instrumental in having the Home included in the local Community Chest's budget.

In pursuing their Mental Health Program, Auxiliaries have led discussions on maturity and marriage in the local high schools. Lincoln County, in cooperation with the P.T.A., held a lecture for the public with Dr. Marshall Fisher, President of the North Carolina Mental Health Society, as the speaker, and also arranged a series of four lectures to the parents and teachers.

Auxiliaries helped with Rural Health Conferences, distributed "Stop Rheumatic Fever" pamphlets and participated in Home and Farm Safety Fairs.

Johnston County used the series of thirteen radio programs "Safe at Home" obtained from the American Medical Association.

The members of the Catawba Auxiliary are helping the Medical Society in the Eleven County Cancer Survey by delivering the specimens weekly to the Cytology Laboratory in Charlotte.

Twenty-four Wake County members manned the blood typing booth for the Medical Society at the State Fair in Raleigh.

Working in close cooperation with the Public Relations Committee of the Medical Society, Mr. William N. Hilliard, Executive Assistant, eighteen Auxiliaries have promoted the High School Essay Contest held by the American Association of Physicians and Surgeons. Three Auxiliaries went further than contacts by offering awards for the local winners, and one county had the winners give their papers at a monthly meeting.

Over 2,000 of the First Aid Sheets prepared and supplied by the Public Relations Committee of the Medical Society were distributed by twenty-two Auxiliaries to more than one hundred thirty-four organizations.

Forty-eight of the fifty-five Auxiliaries plan to observe Doctors' Day.

Material on the Science Fair to be held in April has been sent to all Public relations chairmen, and much interest has been exhibited.

The following meetings have been attended by the chairman: the fall Meeting of the Board of Directors and Workshop, and the Public Relations Conference held in Charlotte by the Public Relations Committee of the Medical Society. Eleven other Auxiliary members attended this Public Relations Conference. The Auxiliary was also represented at the State Rural Health Conference in Raleigh.

Mrs. George W. Holmes,
Chairman

RADIO AND MOVIES COMMITTEE 1956-1957

WAKE

1. Radio and Television to be used for Doctor's Day.

ALAMANCE

1. Radio announcements used to promote scholarship fund.

WATAUGA

1. Supplied movies to high schools pertaining to careers in the field of medicine.
2. Several radio programs used during Career Week.

SCOTLAND

1. "Danger At The Source" to be shown to five organizations during March.

MECKLENBURG

1. Spot announcements for nurse recruitment and Doctor's Day.

ROBESON

1. Radio to be used for Heart Forum in April.

CHOWAN

1. Tape recording on the Crittenton Home.
2. Skit for radio—"Importance of the Family Doctor."

WAYNE

1. Radio announcements for Doctor's Day.

RICHMOND

1. Program on tuberculosis.

PITT

1. Program on radio and television for Doctor's Day.

HAYWOOD

1. Radio program on nurse recruitment.

DURHAM-ORANGE

1. "A Life To Save" used by several local organizations.

JOHNSTON

1. Radio program "Safe At Home."
2. Series from A.M.A.

ROWAN-DAVIE

1. Movie to be shown in March.

Mrs. William H. Romm,
Chairman

NURSE RECRUITMENT REPORT

COUNTIES HAVING LESS THAN THIRTY MEMBERS:

1. Bertie-Gates-Herford—has arranged talks in the high schools by the County Health Nurse and other talks are being arranged for Health Career Day. A tour of a N. C. Hospital is planned for interested students.

2. Chowan-Perquimans—is arranging to show a film on Health Careers to the junior and senior high school classes.

3. Pasquotank-Camden-Currituck-Dare—has made personal contacts, distributed literature and given informal talks.

4. Beaufort-Hyde—is making plans to participate.

5. Craven—has worked through the high school and its Nursing Club. Honored members of the Nursing Club with a tea at which talks on nursing as a profession and physical therapy were given. They are also compiling information on available scholarships.

6. Lenoir—was assigned the responsibility by the local Hospital Board, because of their interest, of recruiting the 1957-58 freshman class for the reactivated School of Nursing at the County Hospital. They have contacted all school principals and advisers requesting their cooperation. After securing twenty representatives, other than Auxiliary members, from surrounding communities, they gave a luncheon for them to complete plans for a tea and a tour of the hospital. The tea is to be held at the Nurses' Home for prospective students and their mothers. The twenty representatives have agreed to make contact and transport the girls and their mothers to the tea. Through a rummage sale, the Auxiliary has raised money for the use of a needy student.

7. Columbus—participated in the Nursing Program on Social Standards Day in the local high

school, and sent letters of information to all County high schools concerning their \$100 scholarship.

8. **Halifax-Northampton**—has cooperated in the securing of high school girls to work as Junior Aids in the Roanoke Rapids Hospital, and, as a result, can report one definite recruit.

9. **Johnston**—sent letter to all high school principals and as a result visited with a student nurse in four of the schools. They are sponsoring a student nurse at Rex Hospital in Raleigh.

10. **Wilson**—have established a three-year scholarship in the Wilson School of Nursing and hold an annual party for freshman nurses soon after their arrival at the school.

11. **Harnett**—talks on nursing were made in eight of the county's high schools to junior and senior girls by qualified nurses from the County Health Department and others.

12. **Hoke**—with only seven members has been working toward recruitment for Nursing and Allied fields and plans to have a recruiter at the Hoke County High School at the end of the school term.

13. **Lee**—The Recruitment Chairman planned a talk with interested students on Career Day. The Auxiliary has \$100 invested in Building and Loan for use by a deserving student desiring to enter training.

14. **Moore**—Participated by helping the Sandhills Veterans Nurse Recruitment Program.

15. **Richmond**—has awarded one scholarship for a student nurse and has more funds available for other applicants. They have distributed brochures and pamphlets concerning the profession of nursing.

16. **Scotland**—The Recruitment Chairman has talked to and counseled individual high school girls about nursing as a career.

17. **Cleveland**—one of our newest Auxiliaries, and they are planning to be active in this project this year. Good luck and congratulations.

18. **Lincoln**—is organizing a Future Nurses' Club and has shown movies in the high schools on nursing and health careers. Prospective students are to be given hospital tours.

19. **Ashe**—is newly organizing after splitting from Watauga and at present has a money-making project in the planning, hoping to use some of the proceeds for recruitment.

20. **Watauga**—is newly organized after splitting with Ashe and, in collaboration with the Boone Business and Professional Woman's Club, have established a \$100 scholarship for a Watauga girl. They have secured publicity on the scholarship and during Career Week in the local high schools will provide films, speakers, radio programs, tours, etc., associated with medicine and allied fields. They have also supplied medical material for the Vertical and Vocational files in their libraries.

21. **Wilkes-Alleghany**—has organized one Future Nurses' Club and plans to extend to other schools next year.

22. **Haywood**—is planning a radio appeal for recruits in nursing.

AUXILIARIES HAVING MORE THAN THIRTY MEMBERS:

1. **Pitt**—has sponsored a Future Nurses' Club in the high school and donated \$5.00 toward expense of having a picture of the Club printed in the Annual. They have furnished materials and leadership, chaperoned the club dance and plan a tour of Duke Hospital.

2. **New Hanover-Pender-Brunswick**—plans program with films and publicity and have distributed pamphlets on nursing.

3. **Edgecombe-Nash**—has one definite recruit who is now applying at schools of nursing.

4. **Wayne**—has awarded a \$300 scholarship for a full training course. One student has graduated and the second is training at present.

5. **Cumberland**—sponsors a Future Nurses' Club in the local high school and entertains the freshmen student nurses each fall.

6. **Robeson**—has sent letter to all county high schools concerning recruitment and offers a scholarship.

7. **Alamance-Caswell**—has a Recruitment Committee of twenty members who have visited all of the twenty high schools in the combined counties talking to girls in the tenth, eleventh and twelfth grades on medical careers. Tours of the hospital with movies for interested girls are planned and a tea for high school seniors who have definitely decided to enter nursing. They have organized the first Future Nurses' Club in the area and offer annually a \$300 loan for high school graduates entering health careers.

8. **Wake**—has improved the recreation facilities at Rex Hospital for the nurses, and remodeled the kitchen of the nurses' home. Recruitment information has been distributed in all local hospitals and a party is planned for freshmen student nurses this fall.

9. **Cabarrus**—A monthly scholarship of \$7.50 has been paid for the past three years.

10. **Mecklenburg**—Awards of \$10 given to the preclinical student having the highest average at the time of their capping exercises have been given in each of the three white hospitals. During Nurse Recruitment five Auxiliary members, two high school students and a representative of the three hospitals appeared on a special television program. By contacting all of the high school principals and student counselors it was arranged to have posters concerning Nurse Recruitment in all of the high schools as well as the Y.W.C.A. and department store windows. At the same time two pictures—one with the Presidents of the Student Body from each of the four hospitals and one with figures dressed in old-fashioned nurse uniforms—appeared with suitable articles and an editorial in the local newspapers. Hospital tours for high school seniors were conducted in all four of the hospitals. 105 students participated in these tours. At present three loans, totalling \$700, have been given—the loan for 1956-57 being for \$250.

11. **Gaston**—A program consisting of slides (made up by the Auxiliary at their expense) posters and visits from nursing instructors, students and members of the Auxiliary was presented to all junior and senior high schools in the county (except colored). A \$25 award was presented to the best all-round student in the graduating class. Besides another student having been granted the loan fund this year, an additional \$50 has been added for their audio-visual program. Hospital Director of Nursing credits the Auxiliary with improvement in the quality of student nurses.

14. **Forsyth-Stokes**—has consulted the vocational guidance teachers in all high schools and distributed literature in the schools. They maintain four loan funds and a three-year scholarship. In April a television program is planned on health careers.

13. **Guilford-High Point Branch**—\$100 was donated to the Hospital Nursing School Emergency Fund by the Auxiliary, and the Recruitment Committee secured an additional donation of \$20 from a local civic organization. \$12.50 was contributed to the Eighth District Scholarship Fund, and \$20 was spent for Y.W.C.A. memberships for student nurses. \$188 was contributed to the maintenance of a

student nurse in the Cabarrus County Hospital. Subscriptions amounting to \$24 were given to the local Nurses' Home. They provided flowers and served at the Nurse Recruitment Tea. This year four girls will graduate who have received scholarships from the Auxiliary.

14. Guilford-Greensboro Branch—The Recruitment Committee participated in both "College Day" and "Career Day" in the local high schools. They distributed pamphlets and nursing school brochures to all local high schools. In May, 1956, at the High School Awards Day, a student, now in training at Watts Hospital, Durham, received the \$100 Scholarship Award. This student is eligible to continue receiving this award until the completion of her training. They have also contributed to the Eighth District Scholarship Fund.

15. Burke—Recruitment information and literature was distributed in local high schools, and window displays on nursing equipment were arranged. They maintain loan funds for three student nurses.

16. Catawba—maintains an annual student loan fund of \$100. At present two recipients have graduated and two are in training. Pamphlets on nursing and information on four schools (practical, graduate and college levels) have been placed in all high schools and libraries in the county, plus a donation of books on nursing to the Public Library. They have secured the cooperation of the local Nurses' Association and Public Health Department in their campaign.

17. Iredell-Alexander—In May the Auxiliary will give teas for both white and Negro high school students. At these teas the Superintendent of Nursing will speak to the girls and they will be given tours of the hospitals.

18. Rowan-Davie—Forty-five high school senior girls were transported to the Hospital where the Auxiliary gave a tea and conducted a tour of the hospital. This was followed up with the distribution of pamphlets and brochures on Nursing and Health Careers in the high schools.

19. Buncombe—has organized three Future Nurses' Clubs of the local high schools which are holding monthly meetings with a representative from the Auxiliary as a leader. Movies have been shown, speakers secured for each phase of nursing such as student nurse, private, general duty nurse, public health, industrial, army, etc. Field trips were planned, and the hospitals are giving full cooperation by allowing interested girls to work in the Pediatric Ward on week-ends. They have two students in training—a senior and a first-year student, both doing well—who are recipients of their Scholarship Loan Fund.

AN ADDITIONAL LESS THAN THIRTY AUXILIARY

22. Caldwell—has decided to support one girl to the completion of her training with an annual \$100 scholarship.

In addition to the Scholarships and Loans mentioned, the N. C. Auxiliary also has one District Loan Fund (the Eighth), and the Past Presidents have raised the sum of \$170 which was awarded in the form of a scholarship to a student at Highsmith Hospital, Fayetteville.

Mrs. A. R. Cross,
Chairman

ANNUAL REPORT—RESEARCH CHAIRMAN 1956-1957

Copies of "Program of Research, 1956-1957" distributed in President's package at fall meeting in Charlotte.

In January, 1957, cards were sent out advising

County Research Chairmen that their reports were due.

Six Counties reported.

Mecklenburg County Medical Auxiliary Research Chairman reported the following:

1. List of ten papers published by Charlotte doctors and where to find them.
2. List of the medical facilities in Charlotte and Mecklenburg County.
3. Clippings from newspapers of honors bestowed upon the county doctors, among them one of Dr. Hamilton McKay. He and Mrs. McKay received a silver tray from the southeast section of the American Urological Association.

Catawba County sent the following:

1. 1500 educational pamphlets were distributed through a booth at the Catawba County Fair.
2. One book on the subject of medicine or nursing was donated to each library in Catawba County.
3. A Project was accepted by the auxiliary to work side by side with the county medical association on a cancer smear program. The auxiliary will deliver the equipment and transport the slides to Charlotte for examination. These tests have been averaging 50 a week.
4. Working with the radio committee in giving a series of radio programs on medical subjects.

Forsyth County sent numerous newspaper clippings of honors bestowed upon doctors, grants for research, and short biographies of doctors of the county. Also an account of a paper by Dr. J. P. Rousseau, "The American Way as a Physician Sees It" and a book compiled by Dr. Roscoe Wall, Jr., "Three Centuries of Obstetrics in North Carolina".

The Greenville, N. C. Research chairman sent a short biography of Dr. Grady Dixon of Ayden, North Carolina, who received the Distinguished Service Award from University of North Carolina Medical School in recognition of high service to medicine and to fellow man.

The report of Rowan-Davie included a biography of Dr. Karl Lawing of Mocksville, N. C., and a full page write up of the new 30-bed hospital opened in Mocksville, North Carolina, during February 1956, also an account of Dr. Thomas Thurston being elected to the North Carolina Board of Medical Examiners.

Several single items from counties were received, such as a short biography of Dr. Joyce Reynolds of Kernersville and a clipping of the pioneer work with Salk Vaccine being done in Cabarrus County by Dr. J. Roy Hege.

All of these clippings and a copy of this report was sent to the Research Chairman of the Southern Medical Association.

Mrs. B. L. Field
State Research Chairman

REPORT ON REVISIONS

Due to the fact that the Revisions Committee made extensive revisions in the By-Laws in 1955-56, there were no changes necessary this year.

Mrs. Gilbert M. Billings
Chairman

REPORT ON RURAL HEALTH 1956-1957

This year has been a year of attempting to tie in the Auxiliary to the Medical Society's program on Rural Health. Conferences were held with Mrs. Annette Boutwell, Rural Health Consultant for the Medical Society, and in conference with her a memorandum giving specific suggestions as to participation in the Health Program was sent out

through the Medical Society to all Auxiliaries. Your Rural Health Chairman, as a member of the Advisory Committee to the Medical Society's Committee on Rural Health and Education, attended Conferences held in Raleigh at which time plans were formulated for District Conferences to take the place of Regional Conferences. The Second District Conference was scheduled to be held February 27th at New Bern; Fourth District Conference on March 14th at Wilson; Sixth District on March 19th at Butner; Eighth District on March 28th at Winston-Salem and Tenth District on April 6th at Waynesville. Letters were written to Presidents of Auxiliaries in these Districts urging that they attend these Conferences and Programs were sent with the letters. Letters were also written to the Medical Society's Conference Chairman of these meetings giving them the names of the Presidents and Rural Health Chairmen of the Auxiliaries in their Districts and suggested that they be called on if needed.

Twenty-nine Rural Health Reports were received and varied from no participation to excellent work along health lines. Home Demonstration Agents were contacted, Public Health nurses gave talks to Auxiliaries, material and aids from the Medical Society's Rural Health Consultant were distributed, TV Stations were contacted to run films, local Health Departments were aided in TB skin tests, assistance was given in rural polio drive, refreshments were served patients waiting in clinics, blood typing for blood banks at a local hospital was done, mothers were helped at registration for pediatric clinic, first aid sheets were distributed to various organizations, envelopes for TB Seal letters were stuffed, etc. Mrs. Boutwell was asked to talk to some of the Auxiliaries on how they could best serve their community and they found her to be extremely helpful.

New Rural Health Report Blanks were sent out this year and tied in with the suggestions in the memorandum of October 1956. At this time there seemed to be some misconceptions regarding the work "program" and it is hoped that in the coming year this can be explained more fully to Auxiliaries and that by next year we will have found where we can be most helpful to the Medical Society in their Rural Health Program—a program which goes on year round—not for just one meeting.

Mrs. Robert N. Creadick
Chairman—Rural Health

REPORT OF COMMITTEE ON YEARBOOK PURPOSE:

1. To complete a Yearbook—or handbook—containing a complete list of names and addresses which might prove more useful to state and county officers and committee chairmen.
2. To include important dates and an informative outline of duties and responsibilities to serve as a guide for all incoming officers and chairmen.
3. To make this Yearbook attractive as well as complete and concise.

MEANS OF ACCOMPLISHMENT:

1. Committee of four members formed soon after May meeting.
2. Sample Yearbook obtained from other states.
3. Contents decided upon and requests for information to be included were written in early summer.
4. Mr. James Barnes, Executive Secretary to the State Medical Society, agreed to multilith and absorb the cost of 200 copies as requested.
5. August 24th was used as a deadline for our

finished product in order to review and distribute the Yearbook at the September Auxiliary Board meeting.

6. Pertinent information which had been delayed was printed in a supplement to the Yearbook.

Your President and Yearbook committee will feel greatly rewarded for sincere and concentrated effort if the yearbook has been helpful; and we will look forward to criticism and suggestions to be passed on to future committees.

Mrs. Charles H. Gay
Chairman

REPORT OF NORTH CAROLINA FAMILY LIFE COUNCIL

I attended the Ninth Annual Family Life Conference of the North Carolina Family Life Council in Charlotte, October 28, 29, and 30.

The Program included outstanding speakers, counseling and demonstration sessions. I was particularly interested in the Units in Family Living which are taught in the Charlotte Public Schools. One of the fourth grades was brought to the Conference to show the teaching procedure used.

There was also an interesting demonstration of a Juvenile Court Hearing.

Each delegate was assigned to a discussion group which met after each Session for evaluation of materials used. I enjoyed being your delegate and appreciate the opportunity to meet outstanding leaders from all over the State who are working toward the betterment of family living.

Mrs. Thomas Henson
Chairman

REPORT ON THE STUDENT LOAN FUND

There are four loans now in use. They are:

1. Miss Mary Lide (now Mrs. Morris)
Bowman Gray School of Medicine,
Winston-Salem \$ 500.00
2. Jerome Schacter, M.D. (intern)
Bellevue Hospital, New York City 500.00
3. William R. Purcell, M.D. (intern)
Medical Center, Charleston, South
Carolina 225.00
4. Mr. Norris Biggerstaff, Bowman
Gray School of Medicine, Winston-
Salem 500.00
(He is in his first year of medicine)

Total \$ 1,725.00

Two requests for loans were made during the Fall of 1956 but were withdrawn before they could be completed, because other arrangements were made. One received a fellowship, the other was married.

On February 9, 1957, a request came from a student nurse for a loan of \$200. It will be carefully considered and granted if approved.

May I, here, express my sincere appreciation to our Treasurer, Mrs. Hitch, for all the details she has handled so efficiently. The many letters she has written and the promptness with which she executes her duties.

The Student Loan Fund shows the following statement as of February 11, 1957:

Balance on hand before contributions	\$1,248.94
Contributions 1956-57:	
Columbus	\$ 10.00
Wake	20.00
Forsyth-Stokes	50.00
Harnett	5.00
Durham-Orange	100.00
Guilford-High Point Branch	10.00
Greensboro	5.00

Wilson	5.00	
Rockingham	5.00	
Cleveland	25.00	
Surry-Yadkin	10.00	
Robeson	5.00	351.50

Balance as of May 6, 1957 \$1,545.33

Thank you for your support and for allowing me the pleasure and privilege of being middle-man between the Student Loan Fund and the recipients of loans. It has been a great satisfaction and makes me feel that this is one of the most worthwhile parts of our program.

Mrs. Roscoe D. McMillan
Chairman

REPORT ON TODAY'S HEALTH

Reports have been received from 39 of the 55 auxiliaries. Subscription credits as of February 1956 were 375, and for February 1957 a total of 679 credits. This includes the 133 subscriptions bought by the Medical Society of the State of North Carolina for presentation to 4-H Club Winners, and 90 gift subscriptions other than direct Christmas orders. 280 are being received in the offices of physicians and dentists. Three counties reported cooperating with Operation Christmas with 20 subscriptions sold. Nine counties are giving *Today's Health* to schools and one county is giving the magazine to a Public Library.

In the Exclusive Club of the National Subscription Contest 5 North Carolina counties were represented. They were: Bertie-Herford-Gates, 156 per cent; Richmond, 155 per cent; Lincoln, 136 per cent; Onslow, 127 per cent; Lenoir, 112 per cent. Two made the more exclusive, Columbus, 325 per cent, and Stanly, 303 per cent.

The Future Nurses Club of Pitt County is aiding in the selling of *Today's Health*.

The most outstanding accomplishment is that of the newly organized Stanly County. In the short time of one month after receiving their information and materials they report 70 subscriptions—26 going to the offices of physicians and dentists.

The lists of subscribers throughout the State was secured from the Chicago office, and after being compiled by counties was distributed to each county chairman.

An alphabetical file is being kept by the State Chairman of the Counties with a list of subscribers in each County.

Mrs. A. M. Mumford
Chairman

REPORT OF THE COUNCILOR TO THE SOUTHERN MEDICAL ASSOCIATION

Total North Carolina Auxiliary membership for:	
1955-56	2,052
1956-57	2,200

Total Southern Auxiliary membership in North Carolina for:	
1955-56	407
1956-57	475

Doctor's Day

In 1955-56 thirty or 60 per cent of the fifty North Carolina county organizations participated in the observance of Doctor's Day.

In 1956-57 fifty or 89 per cent of the fifty-five North Carolina county organizations anticipate participation in the observance of Doctor's Day.

Research

In 1955-56 seven or 14 per cent of the fifty North Carolina county organizations sent material to the North Carolina Research Chairman.

In 1956-57 six or 9.16 per cent of the fifty-five North Carolina county organizations sent material

to the North Carolina Research Chairman.

Clippings and a copy of the report of the Research Chairman were sent to the Research Chairman of the Auxiliary to the Southern Medical Association.

Jane Todd Crawford Memorial Fund

In November 1955 the Woman's Auxiliary to the Southern Medical Association discontinued the collection of funds for the Jane Todd Crawford Memorial Fund, the money on hand to be used to present to Residents in Gynecology in southern hospitals gift subscriptions to the *Southern Medical Journal*. Brochures were sent to seven residents, but none requested a subscription.

At the 1956 Annual Convention it was decided to continue for another year this program of gift subscriptions. The names of the Residents in Gynecology in North Carolina hospitals will be sent to the Jane Todd Crawford Memorial Chairman of the Southern Auxiliary.

Annual Convention

The Thirty-Second Annual Convention of the Woman's Auxiliary to the Southern Medical Association was held in Washington, D. C., November 1956. Twenty-four members from North Carolina were registered. The report of the North Carolina Councilor to Southern was presented, and the North Carolina Doctor's Day Scrapbook and the Mecklenburg County Poster for Doctor's Day were displayed. Mrs. Harry L. Johnson of Elkin, North Carolina, was elected Second Vice-President of the organization.

The Thirty-Third Annual Convention of the Woman's Auxiliary to the Southern Medical Association will be held in Miami Beach, Florida, November 11-14, 1957. Auxiliary headquarters will be the Deland Hotel.

Mrs. Harvey C. May
Councilor

REPORT OF THE COOPER BED

Excepting for a period of one month, the Cooper Bed has been occupied continuously.

Dr. A. H. Rose, Smithfield, N. C., was discharged August 28th for continued rest at home before re-entering practice.

"I think all of us should be proud of such a nice place as Eastern Carolina Sanatorium. I have a very warm feeling in my heart for the Doctors' wives of North Carolina". This is a quote from a grateful patient.

Miss Evelyn Marie Paul was accepted as a patient for the Cooper Bed early in October, having been a patient at the Sanatorium since September 21st. Miss Paul, who is from Belhaven, N. C., and eighteen years of age, had just begun a career in nursing. She is adequately covered by an insurance policy for 330 days. While the Auxiliary is not paying any of the hospital bill, the various county units have carried out the Remembrance Program 100 per cent. The Bed has been supplied with two magazine subscriptions. Miss Paul has received many personal items such as a robe, pajamas, bedroom slippers, Yardley's soaps, note paper, greeting cards at Christmas and Valentine's Day. Because of the distances involved in the First District, the bed is not visited as frequently as it should be. The First District Councilor and the Cooper Bed Chairman have scheduled a visit to the Bed February 4th.

I wish to thank the Sanatoria Bed Chairmen for their splendid cooperation in furthering this program.

Mrs. R. H. Vaughan
Chairman

REPORT OF THE STEVENS BED

Miss Louise Ware was the patient who occupied the Stevens Bed until December 1956.

March—Watauga-Ashe

June—Mecklenburg

July—Haywood—Auxiliary members visited patient taking candy, pajamas, and jelly. Christmas cards were also sent.

August—Wilkes-Alleghany—sent crochet thread and three books.

October—Lincoln—sent candy, stationery, and stamps.

November—Buncombe—met for coffee November 7th at the Sanatorium. Each member took a gift to make up a Sunshine Box. Miss Ware was able to receive guests and gifts of stationery, pencils, pens, book, cash, soap, perfume and toilet articles were presented.

December—Caldwell and Burke counties sent a cash gift of \$10.00.

Your chairman sent personal gifts and wrote letters at intervals.

Burke County also sent \$50.00 in cash.

January—Gaston—sent gift box of toilet articles and a subscription to Readers Digest.

New occupant is Dr. H. T. Horsley of Franklin, N. C.

Mrs. Paul W. Johnson
Chairman

REPORT OF THE MCCAIN BED

Mr. Vestal C. Taylor of Fayetteville, N. C., occupied the McCain Bed from May 13, 1956, until August 30, 1956. He is now doing full time work with the Fayetteville Radio Broadcasting Company.

September 8, 1956 Mr. N. F. Furrage of Parkton, N. C., became our guest. He is an ex-patient. His wife is Assistant Director of Nursing at McCain. Mr. Furrage has made slow but good progress since undergoing surgery in the early Fall. He was discharged from the Sanatorium, January 12th of this year.

The Medical Staff recommended Mrs. Eleana Spence to be our next guest. Mrs. Spence is a graduate nurse of Goldsboro, N. C. Her physician thinks she will need the bed for about eight months.

In accordance with the pre-arranged schedule, our guests have been remembered each month with gifts from the county Auxiliaries. I have notified each Auxiliary in advance of their month.

I am fortunate in living near McCain so I stop in for a visit to our guest every few weeks. They are always so glad to see you that it makes you want to go more often. I wish each auxiliary member could share this privilege and pleasure with me.

Mrs. R. A. Matheson,
Chairman

REPORT OF THE YODER BED

Endowment	February 1957
U. S. Savings Bonds, Series "K"	\$5,000.00
Total Amount of Contributions	957.40
Number of Counties Contributing	45.00

Participation

Twelve (12) Auxiliaries were assigned to the Yoder Bed Remembrance Schedule. Each one has remembered the patient according to schedule and in each instance has sent gifts which have been suggested according to the needs of the patient.

Chairman

Your Chairman prepared 150 copies of the Remembrance Schedule for inclusion in the Packets at the Fall Board Meeting. A letter urging continued contributions to the Endowment Fund was mailed to all County Presidents and District

Councilors. In December, each county Chairman was sent a letter informing them of the change in patients, and each County on the Schedule has been reminded a month in advance of their assignment and provided with pertinent information about our guests. Your Chairman has averaged visiting our guests three or four times a month, taking them a box of candy or some fruit on most visits. Mrs. Bolick and Dr. Kajikuri were remembered by your Chairman on their birthdays. Dr. Fields visited both Dr. Monroe and Dr. Kajikuri, taking them current medical periodicals.

Guests

Mrs. Nellie Bolick, Rt. 1, Effland, N. C., was our third guest in the Yoder Bed. She entered the hospital, February 1956 and was discharged in November 1956. Mrs. Bolick was most appreciative of all the nice gifts, cards and money which she received from our Auxiliaries. She was also remembered on her birthday.

While Mrs. Bolick was a guest in our Bed, Dr. J. Thad Monroe of Fayetteville, N. C., entered Gravely, June 1956. Since Mrs. Bolick was a very needy person and could not get Welfare assistance until November 1956, the doctors felt that a change should not be made until that time, even though Dr. Monroe was the one eligible for the Yoder Bed. The situation was discussed with Dr. Monroe and he was given special consideration by the hospital. He was discharged in August 1956. Dr. Fields and I carried him a box of candy and some medical periodicals during his brief stay in the hospital.

Our fourth guest is Dr. Hisashi Kajikuri of Japan. He was serving on the N. C. Memorial Staff as a surgical intern when he became ill in November 1956. Dr. Kajikuri is getting along fine but was not able to be discharged from the hospital in January as Dr. Barnett first thought. He is one of the most appreciative persons I have ever seen. He is very lonesome and being so far away from home and family, any little gesture of friendship means a lot to him. He has received some nice records, a check, candy, fruit and cards from our Auxiliaries.

The Chairman would like to take this opportunity to thank each Auxiliary for their nice gifts to our guest and for their generous contributions to the Endowment Fund.

Mrs. Leonard E. Fields
Chairman

REPORT OF THE NORTH CAROLINA COUNCIL OF WOMEN'S ORGANIZATIONS

On the third of May, the North Carolina Council of Women held its first meeting of 1956-57 at Abernathy Hall, to make final plans for the Workshop to be held from July 23rd to 26th.

It was moved and seconded that the North Carolina Council of Women's Organizations accept the invitation of the Extension Division to become a cooperative service.

It was stated that Foundations would give to North Carolina Council of Women's Organizations, money that they would not give to any other organization, and that the Executive Committee would have the privilege to refuse contributions that were earmarked. Also, it was stated that office space was available.

The Medical Auxiliary contributed \$25.00 to the leadership training workshop which allowed five representatives from the Auxiliary to the North Carolina Council of Women, four of which attended and are listed as follows:

Mrs. T. C. Wilkinson, Wake Forest
Mrs. Kenneth Brinkhous, Chapel Hill
Mrs. Donnie Royal, New Bern
Mrs. E. M. Robertson, Durham

Mrs. Wilkinson and Mrs. Brinkhous were presented Leadership Certificates, having been present at every class and having made contributions to the class. Mrs. Edwin M. Robertson, representing the North Carolina Council of Women to the Auxiliary was present at the District Auxiliary Meeting in Charlotte in October and at that time gave a verbal report on the Workshop.

The Medical Auxiliary is not on the Executive Board of the North Carolina Council of Women in 1957 as the board members alternate.

On February 14, 1957, the North Carolina Council of Women and World Affairs Conference held a Luncheon at the Carolina Inn in Chapel Hill. There was no business transaction at the Luncheon.

Mrs. E. M. Robertson
Representative of the North
Carolina Medical Auxiliary
to the North Carolina
Council of Women

REPORT ON FLORENCE CRITTENTON HOME PROGRAMS:

A total of fifteen Auxiliaries used programs about the Crittenton Home.

Speakers were furnished by the Home for nine. Tape recordings were used by two.

Six Auxiliaries prepared their own programs on the Home from the publicity packets.

CASH DONATIONS TO THE HOME:—seven.
Total amount \$119.44.

INTERPRETATION TO COMMUNITY:

Wilson County assisted by including brochures in two thousand United Fund Drive Packets.

Catawba County Auxiliary distributed twenty-three publicity packets to the Home Demonstration Club in the County.

Johnston County Auxiliary assisted by furnishing names of prospective contributors in the Community.

We are especially grateful to Wilson and Alamance Counties for their part in getting the Florence Crittenton Home included in their local Community Chests.

Mrs. John C. Glenn, Jr.
Representative
Florence Crittenton Home

EYE BANK FOR RESTORING SIGHT, INC. REPORT

Mrs. R. Winston Roberts, Representative for the Auxiliary to the Eye Bank, attended the Annual Meeting of this group on September 21, 1956, held at the Forsyth Country Club in Winston-Salem. This organization obtains, preserves and transports eyes for corneal transplants and is supervised by the North Carolina Medical Society.

Since May 1, 1956, the total eye donations received were 387. Membership donations totalled \$1420.40. The officers and Board of Directors voted to accept the offer of the Baptist Hospital of North Carolina to place the Eye Bank in that Institution. They voted to employ Mrs. A. R. Nicholas as full time Secretary, her part time duties to be the promotion of the work of the Eye Bank throughout North Carolina. She has available projection equipment and a thirty minute film from the New York Eye Bank, "Mrs. Dobson's Miracle", and the twelve minute Boston Eye Bank film, "Eyes For Service". Local ophthalmologists have given talks in conjunction with these films in several of the presentations, in this first year.

Booklets and Eye Donation and Membership forms are available.

Mrs. R. Winston Roberts
Representative

THE AUXILIARY TO THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA REPORT OF THE MEMORIAL COMMITTEE

The names of departed members which have been reported since May 1956 are as follows:

Mrs. T. G. Bradshaw, Wilson (Wilson)
Mrs. James M. Judd, Varina (Wake)
Mrs. William P. Kavanagh, Salisbury (Rowan-Davie)
Mrs. Angus M. McDonald, Charlotte (Mecklenburg)
Mrs. Lundie C. Ogburn, Winston-Salem (Forsyth-Stokes)
Mrs. Paul G. Parker, Erwin (Harnett)
Mrs. J. Rush Shull, Charlotte (Mecklenburg)
Mrs. H. H. Simpson, Burlington (Alamance-Caswell)
Mrs. Walter M. Summerville, Charlotte (Mecklenburg)
Mrs. W. E. Wilson, Mooresville (Iredell-Alexander)
Mrs. G. B. Woodard, (1955), Wilson (Wilson)
Mrs. C. A. Woodard, (1955), Wilson (Wilson)

Mrs. Charles T. Grier,
Chairman

DOCTOR'S DAY REPORT 1956-57

There were forty-two county auxiliaries reporting observance of Doctor's Day, an increase of eleven over the past year and the largest number on record in North Carolina.

In honor of Doctor's Day twenty counties reported donations to the American Medical Education Foundation Fund.

The day was more extensively publicized than ever before. Many newspaper articles and editorials were written, and the mediums of radio and television were used for various programs and spot announcements.

Other observances included distribution of red carnations, dinner parties and receptions, with or without entertainment, window displays, recognition by ministers in sermons and church bulletins, flowers in churches and on graves of deceased doctors, personal letters and cards, cards on hospital trays, gifts of books to doctors' libraries, refreshments served to doctors in hospitals, and two nursing scholarships.

Those auxiliaries reporting were: Surry-Yadkin, Watauga, Pitt, New Hanover, Mecklenburg, Greensboro Branch of Guilford, Lee, Onslow, Harnett, Chowan-Perquimans, Beaufort, Robeson, Person, Durham-Orange, Carteret, Haywood, Richmond, Scotland, Hoke, Ashe, Lincoln, Gaston, Columbus, Wilson, Forsyth-Stokes, Sampson, Johnson, Wake, Cumberland, High Point Branch of Guilford, Rowan-Davie, Burke, Wayne, Buncombe, Bladen, Cleveland, Wilkes-Alleghany, Craven, Bertie-Gates-Herford, Pasquotank-Camden-Currituck-Dare and Cabarrus.

In the President's Reports, fifty-one counties expected to observe Doctor's Day. This may mean that ten county chairmen did not report, but it is evident that Doctor's Day was widely observed.

Mrs. Quinton E. Cooke,
Chairman

ROSTER OF MEMBERS

1957 - 1958

*Attended 1957 Meeting

†Deceased

HONORARY MEMBERS

Holmes, Mrs. A. Byron, 112 Church
Street Fairmont
Judd, Mrs. E. Clarence, 2108 Woodland
Avenue Raleigh
Knight, Mrs. William P., 720 Summit
Avenue Greensboro
McCain, Mrs. Paul P., Ridge
Street Southern Pines
Taylor, Mrs. Frederick R., 1113 Johnson
Street High Point

LIFE MEMBERS

Bulla, Mrs. Alexander C., 1709 Colonial
Road Raleigh
Murray, Mrs. Robert L., Box 216 Raeford
Yoder, Mrs. Paul A., 1919 Robin Hood
Road Winston-Salem

MEMBERS

Abbott, Mrs. Robert W., State
Hospital Goldsboro
Abel, Mrs. Joshua Fanning Waynesville
Abernethy, Mrs. Joseph W., 12 Fifth Avenue,
N. W. Hickory
Abernethy, Mrs. Paul McBee, 510 Country
Club Drive Burlington
Adair, Mrs. William E., Jr., 502 East G
Street Erwin
Adams, Mrs. Carlisle, 1640 Dilworth
Road, E. Charlotte
Adams, Mrs. Carlton N., 2930 Windsor
Road Winston-Salem
Adams, Mrs. Charles P., Eastern
Street Greenville
Adams, Mrs. H. Stewart, 432 Carolina
Circle Winston-Salem
Adams, Mrs. J. Robert, 335 Eastover
Road Charlotte
Adams, Mrs. P. Evans Norlina
Adams, Mrs. Rayford K., State
Hospital Morganton
Ader, Mrs. Otis Ladeau Walkertown
Aderholt, Mrs. Marcus L., Jr., 1013 Rotary
Drive High Point
Adkins, Mrs. Trogler F., 2810 Dogwood
Road Durham
*Agner, Mrs. Marshall E., Box 157 Cherryville
Agner, Mrs. Roy A., Jr., 220 Ackert
Avenue Salisbury
Alderman, Mrs. Allison M., Jr., 1311 Westfield
Avenue Raleigh
Alderman, Mrs. Edward H., Drawer
P Four Oaks
Alexander, Mrs. Eben, Jr., 521 Westover
Avenue Winston-Salem
Alexander, Mrs. James M., 255 Colville
Road Charlotte
Alexander, Mrs. James P., 2708 Bucknell
Avenue Charlotte
Alexander, Mrs. Joseph B., 1001 N. Walnut
Street Lumberton
Alexander, Mrs. Lawrence M., 715 S. Snow
Hill Street Ayden
*Alexander, Mrs. Sydenham B., Dogwood
Drive Chapel Hill
Allen, Mrs. George C., 206 E. 17th
Street Lumberton
*Allen, Mrs. John O., 201 Broad Street Marion
Allen, Mrs. LeRoy, 805 W. Gardner Raleigh
Allgood, Mrs. John W., Jr., 105 Knollwood
Drive Greensboro
*Alsup, Mrs. William B., 261 Westview
Drive Winston-Salem
Alyea, Mrs. Edwin P., 3102 Devon Road,
Hope Valley Durham
Ames, Mrs. Richard H., 2316 Princess Ann
Street Greensboro
*Anders, Mrs. McTyre Gallant, 416 W. 5th
Avenue Gastonia
Anderson, Mrs. Benjamin N., Jr., 1932 Smallwood
Drive Raleigh
Anderson, Mrs. Elbert C., 4934 Oleander
Drive Wilmington
*Anderson, Mrs. Henry S. Mocksville
*Anderson, Mrs. John B., 294 Vanderbilt
Road Asheville
*Anderson, Mrs. Norman L., 86 Victoria
Road Asheville
Anderson, Mrs. Robert A., 320 Pembroke
Avenue Ahsokie
Anderson, Mrs. W. Banks, 5028 E. Forest
Hills Blvd. Durham
Andrew, Mrs. John M., Box 524 Lexington
Andrew, Mrs. Lacy A., Jr., 2839 Reynolds
Road Winston-Salem
Andrews, Mrs. Robert Jackson, Box 28 Roxboro
*Angel, Mrs. Edgar Franklin
Angel, Mrs. Furman Franklin
Anlyan, Mrs. William G., 1507 Woodburn
Road Durham
*Anthony, Mrs. William A., 1203 Belvedere
Avenue Gastonia
Antonakos, Mrs. Theodore Danbury
Applewhite, Mrs. Calvin C., 2616 Grant
Avenue Raleigh
Arena, Mrs. Jay M., 2032 Club
Blvd. Durham
Arey, Mrs. J. Vincent, 936 Arbor Lane Concord
Armistead, Mrs. D. Branch, 1603 E. 6th
Street Greenville
Armstrong, Mrs. Beverly W., 126 Altondale
Avenue Charlotte
Armstrong, Mrs. Charles W., 629 Mitchell
Avenue Salisbury
Arney, Mrs. William C., W. Park
Drive Morganton
Arnold, Mrs. Jesse H., 709 W. Highland
Avenue Kinston
Arnold, Mrs. Ralph A., 911 Urban
Avenue Durham
Arrendell, Mrs. Cad Walder, 1007 Andover
Road Charlotte
Ashby, Mrs. Edward C. Mt. Airy
*Ashe, Mrs. John R., Jr., S. Spring
Street Concord
Ashford, Mrs. Charles H., 605 Pollock
Street New Bern
Atkins, Mrs. Stanley S., 7 N. Dogwood
Road Asheville
Ausband, Mrs. John R., 817 Shoreland
Road Winston-Salem
Austin, Mrs. Frederick D., Sr., 601 Sunnyside
Avenue Charlotte
*Austin, Mrs. Frederick D., Jr., 650 Colville
Road Charlotte

Averett, Mrs. Leland S., Jr., 611 Sunset Drive	High Point
Avery, Mrs. Edward S., 1824 Meadowbrook Drive	Winston-Salem
Aycock, Mrs. Edwin B., Longmeadow Road	Greenville
Aycock, Mrs. James B., 200 Blowing Rock Road	Lenior
Aycock, Mrs. William Glenn	Mebane
*Ayers, Mrs. James S., Finch Street	Clinton
Bagby, Mrs. B. B., V. A. Hospital	Oteen
Baggett, Mrs. Joseph W., 203 Devane Street	Fayetteville
Bahnson, Mrs. E. Reid, 2525 Windsor Road	Winston-Salem
Bailey, Mrs. Clarence W., 512 Shady Circle Drive	Rocky Mount
Bailey, Mrs. Joseph P.	Flat Rock
*Bailey, Mrs. Robert C., 720 S. Union Street	Concord
*Baker, Mrs. Barnwell R., 13 Hilltop Road	Asheville
Baker, Mrs. Horace M., Sr., 703 N. Elm Street	Lumberton
Baker, Mrs. Horace M., Jr., 213 W. 17th Street	Lumberton
Baker, Mrs. Larry D., 400 N. Edgemont Avenue	Gastonia
*Baker, Mrs. Lenox D., 3106 Cornwall Road, Hope Valley	Durham
Baker, Mrs. Roger D., 303 Swift Avenue	Durham
*Baker, Mrs. Thomas W., 2029 Queens Road	Charlotte
Baldwin, Mrs. William E., Jr., R.F.D.	Whiteville
Ballew, Mrs. James R., 901 Lake Boone Trail	Raleigh
*Balsley, Mrs. Robert E.	Reidsville
*Baluss, Mrs. John W., Jr., 115 Pinecrest Drive	Fayetteville
Bandy, Mrs. William G., 601 N. Laurel Street	Lincolnton
Bandy, Mrs. William H., Dogwood Hills ..	Newton
Banner, Mrs. Charles W., 808 N. Elm Street	Greensboro
Barber, Mrs. John F., 7 Lockly Avenue	Asheville
Barden, Mrs. Graham A., Jr., 412 Johnson Street	New Bern
Bardin, Mrs. Robert M., 202 W. Trinity Avenue	Durham
*Barefoot, Mrs. Graham B., 120 Forest Hills Drive	Wilmington
Barefoot, Mrs. Julius J., Sr., 315 Johnson Street	New Bern
Barefoot, Mrs. Julius J. Jr., Morehead Road	New Bern
Barefoot, Mrs. Sherwood W., 3107 Madison Avenue	Greensboro
Barefoot, Mrs. William Frederick, Chadbourn Road	Whiteville
Barker, Mrs. Christopher S., 711 Broad Street	New Bern
Barnes, Mrs. Frank E., Jr., 513 Church Street	Smithfield
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Barnhill, Mrs. Otha A., Box 505	Elizabethtown
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Barrett, Mrs. John M., 805 James Street	Greenville
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Barringer, Mrs. Phil L.	Monroe
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Bartlett, Mrs. Stephen R., Jr., 208 N. Longmeadow Road	Greenville
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Baynes, Mrs. Ralph H.	Hurdle Mills
Beale, Mrs. Seth M.	Elkin
Beall, Mrs. Lawrence L., 408 Woodlawn Avenue	Greensboro
Beam, Mrs. Hugh Martin, 306 S. Lamar Street	Roxboro
Bear, Mrs. Sigmond A., 1415 S. Live Oak Parkway	Wilmington
Beavers, Mrs. Charles L., 1110 Sunset Drive	Greensboro
Beavers, Mrs. James W., 2206 W. Market Street	Greensboro
*Beavers, Mrs. William O., Route 1	McLeansville
Beck, Mrs. J. Montgomery, Route 7	Burlington
*Beddingfield, Mrs. Edgar T., Jr.	Stantonsburg
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Belk, Mrs. George W., 403 W. 6th Avenue	Gastonia
Bell, Mrs. G. Erick, 1501 W. Nash Street	Wilson
Bell, Mrs. Ira E., 508 Sixth Street, N.W.	Hickory
Bell, Mrs. Orville E., 829 Sycamore Street	Rocky Mount
Bell, Mrs. Spencer A.	Hamptonville
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Bellamy, Mrs. Robert Hartlee, Greenway Avenue	Wilmington
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Bender, Mrs. John J.	Red Springs
Bender, Mrs. John R., 1166 S. Hawthorne Road	Winston-Salem
Bennett, Mrs. Ernest C., Box 295	Elizabethtown
Bennett, Mrs. Hugh Hammond, Jr., Circle Drive	Burlington
Bennett, Mrs. John N., c/o Wilkes General Hospital	North Wilkesboro
Bensen, Mrs. Vladimir B., 205 Taylor Street	Raleigh
Benson, Mrs. John F., 710 Gatewood	High Point
Benson, Mrs. N. Oliver, 203 E. 19th Street	Lumberton
*Benson, Mrs. Walter R.	Chapel Hill
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Best, Mrs. James E., 3513 Friendly Road	Greensboro

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Bever, Mrs. Christopher T., 109 N. Loundary Street	Chapel Hill
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Biggs, Mrs. J. Irvin, 2201 Elm Street	Lumberton
*Bigham, Mrs. Roy S., Jr., 2521 Hampton Avenue	Charlotte
*Billings, Mrs. Gilbert M., 122 Powe Street	Morganton
Bingham, Mrs. R. K., 105 Hardin Street	Boone
Bird, Mrs. Ignacio, 224 East Avondale	Greensboro
Bitting, Mrs. Numa D., 34 Oak Drive	Durham
*Bittinger, Mrs. Charles L., 734 Pinewood Circle	Mooreville
*Bittinger, Mrs. Samuel M.	Black Mountain
*Bivens, Mrs. Edward Shirley, East Street	Albemarle
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Bizzell, Mrs. M. Edward, 500 E. Walnut Street	Goldsboro
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Black, Mrs. Kyle E., Country Club	Salisbury
Black, Mrs. Paul A. L., 2732 Park Avenue	Wilmington
Blackmon, Mrs. Bruce B.	Buie's Creek
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Blair, Mrs. J. Samuel, 1116 Cumberland Avenue	Gastonia
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Bland, Mrs. William H., 311 N. Harrison	Cary
Bloor, Mrs. Byron M., 2216 Elba Street	Durham
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Bradford, Mrs. Williamson Z., 310 Colville Road	Charlotte
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*Brewton, Mrs. W. Allan	Enka
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Bullock, Mrs. D. Douglas, Sr.	Rowland
Bulluck, Mrs. Matthew, Wrightsville Beach	Wilmington
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Campbell, Mrs. J. M., 2115 Yost Avenue	Salisbury
Campbell, Mrs. Joseph L., 306 Kincaid Avenue	Wilson
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Covington, Mrs. John M. C., 324 Jackson Street	Roanoke Rapids
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Crumpler, Mrs. Warren H., N. Johnson Street	Mt. Olive
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Daniels, Mrs. Robert E., 23 Vance Crescent	West Asheville
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Davis, Mrs. Grayson	Hope Mills
Davis, Mrs. Jack B.	Waynesville
Davis, Mrs. James E., 908 W. Markham Avenue	Durham
Davis, Mrs. John W., Route 5, Box 709	Hickory
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Davis, Mrs. Philip B., 807 Florham Avenue	High Point
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- Elliott, Mrs. J. Palmer Draper
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- *Elliott, Mrs. William McB., Westview Forest City
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- Farmer, Mrs. William D., 1011 Country Club Drive Greensboro
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*Fleetwood, Mrs. Joe A., Jr.	Conway
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Floyd, Mrs. Hal S., Lake View Road	Fairmont
Floyd, Mrs. W. Russell, Mt. Pleasant Highway	Concord
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Freeman, Mrs. Percy L., Gastonia Highway	Bessemer City
Freeman, Mrs. Roy O.	Jefferson
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Hall, Mrs. John Moir	Elkin
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Hand, Mrs. LeRoy C., Jr.	Gatesville
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- *Huffman, Mrs. S. Vance, Route 2 Elon College
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- Hughes, Mrs. Jack, Cole Mill Road Durham
- Humbert, Mrs. Walter C., 1906 E. 6th Street Greenville
- Humphries, Mrs. Charles O., Hollow Rock Farm, Erwin Rd., Rt. 1 Durham
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Hunter, Mrs. Shelton B., Jr.	Kenly	Johnson, Mrs. Harry L.	Elkin
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James, Mrs. William Daniel, Vance Street	Hamlet	Jones, Mrs. O. Hunter, 1710 Queens Road, W.	Charlotte
James, Mrs. W. Dner, 306 Entwistle Street	Hamlet	*Jones, Mrs. Paul Erastus, 133 N. Union	Concord
Jarman, Mrs. F. Graham, Sr., 402 Hamilton Street	Roanoke Rapids	Jones, Mrs. Ransom J., 1417 N. Queen Street	Kinston
Jarman, Mrs. F. Graham, Jr., 429 Sunset Avenue	Roanoke Rapids	Jones, Mrs. Robert S.	Rocky Mount
Jenkins, Mrs. Albert M., 823 Bryan Street	Raleigh	Jones, Mrs. T. Clyde	Jefferson
Jennings, Mrs. Lowell E., 1505 Pearl Street	Gastonia	Jones, Mrs. Thomas T., 2701 Augusta Drive	Durham
Jennings, Mrs. Royal G., Emerywood Estates	High Point	Jones, Mrs. William McC., York Street Ext.	Gastonia
Jensen, Mrs. Milton B., 152 Milford Drive	Salisbury	Jones, Mrs. William R., 828 Sunset Avenue	Rocky Mount
Jervy, Mrs. William St. J., 907 Elizabeth Road	Shelby	Jordan, Mrs. John A., Jr., 236 Pinecrest Drive	Fayetteville
		*Jordan, Mrs. Riley M.	Raeford
		Jordan, Mrs. Weldon H., 601 Westmont Drive	Fayetteville
		Joyce, Mrs. Charles Weldon	Madison

*Joyner, Mrs. Theodore H., Howard Gap Road	Hendersonville
Joyner, Mrs. William S., 738A Gimghoul Road	Chapel Hill
Judd, Mrs. Glenn B.	Varina
Justa, Mrs. Samuel H., 505 Piedmont Avenue	Rocky Mount
Justice, Mrs. William S., 14 White Oak Road	Asheville
*Justis, Mrs. Homer R., 532 Baxter Road	Charlotte
*Kalevas, Mrs. Harry J., 5415 Wedgewood Drive	Charlotte
Katz, Mrs. Joseph, Kinston Apts.	Kinston
Kaufman, Mrs. Karl F., S. Rugby Road	Hendersonville
†Kavanagh, Mrs. William P., 1127 Henderson Street	Salisbury
Kearns, Mrs. Paul R., 331 Fieldstone Circle	Statesville
*Kearse, Mrs. William O.	Canton
Keathley, Mrs. Franklin Burr, 206 Grove Avenue	Lenoir
Keiter, Mrs. W. Eugene, 1507 Perry Park Drive	Kinston
Keith, Mrs. Marion Y., 1603 Carlisle Road	Greensboro
*Keleher, Mrs. Michael F., 18 Maywood Road	Asheville
Keller, Mrs. Guy O., 2515 Crescent Avenue Ext.	Charlotte
Keller, Mrs. John H., Academy Street	Ahoskie
Kelley, Mrs. Thomas Francis, 805 Montgomery Avenue	Albemarle
Kelly, Mrs. Luther W., Sr., 1014 Kenilworth Avenue	Charlotte
Kelly, Mrs. Luther W., Jr., 3915 Shelton Place	Charlotte
Kelly, Mrs. Richard, 2723 Knollwood Road	Greensboro
Kelly, Mrs. Richard S., Jr., 213 Dobbin Avenue	Fayetteville
Kemp, Mrs. Malcom D., 210 Highland Road	Southern Pines
*Kendall, Mrs. Ben H., 116 Belvedere Avenue	Shelby
Kendall, Mrs. John H., 800 Stewart Avenue	Clinton
Kendrick, Mrs. Charles Mattox, 103 Poplar Street	Lenoir
Kennedy, Mrs. John P., 2026 Providence Road	Charlotte
Kennedy, Mrs. Leon T., 1907 Sterling Road	Charlotte
Kent, Mrs. Alfred A., Jr.	Granite Falls
Kernon, Mrs. Louis T., 1625 Canterbury Road	Raleigh
Kernodle, Mrs. Charles E., Jr., 444 Tarleton Avenue	Burlington
Kernodle, Mrs. Dwight T., Route 2	Elon College
Kernodle, Mrs. George W., 619 Atwater Street	Burlington
*Kernodle, Mrs. John R., Edgewood Avenue Ext.	Burlington
Kerns, Mrs. Thomas C., 120 Briarcliff Road	Durham
Kerr, Mrs. George R., 432 Guthrie Street	Burlington
*Kerr, Mrs. John G.	Leicester
Kerr, Mrs. Joseph T., 304 Kincaid Avenue	Wilson
Kesler, Mrs. Robert C., 705 Twyckenham Drive	Greensboro
*Kester, Mrs. John M., Jr., 2035 Park Road	Charlotte
Keys, Mrs. Carson M.	Jefferson
*Kibler, Mrs. William H., 100 Valdese Avenue	Morganton
Kidd, Mrs. Ralph V., Jr., 1236 Romany Road	Charlotte
King, Mrs. D. I. Campbell	Flat Rock
King, Mrs. Francis P., 1603 Lucerne Way	New Bern
King, Mrs. Parks McCombs, 4727 Wendover Lane	Charlotte
*King, Mrs. Robert W., 113 Dobbin Avenue	Fayetteville
*King, Mrs. Walter G., 1305 Latham Road	Greensboro
Kingsley, Mrs. William B., Armstrong Circle	Gastonia
Kinlaw, Mrs. Murray C., 202 W. 21st Street	Lumberton
*Kirby, Mrs. W. Leslie, 734 Arbor Road	Winston-Salem
Kirksey, Mrs. James J., Riverside Drive	Morganton
*Kirksey, Mrs. William A., 302 S. King Street	Morganton
Kistler, Mrs. Clark C., 2212 St. Mary's Street	Raleigh
Kitchin, Mrs. Thurman D., 413 N. Main Street	Wake Forest
Kitchin, Mrs. W. Walton, 505 Stewart Avenue	Clinton
Kleiman, Mrs. David, 1527 Iredell Drive	Raleigh
Klenner, Mrs. Fred R.	Reidsville
Kling, Mrs. Llewellyn E., 1309 N. Market Street	Washington
*Klostermyer, Mrs. Louis L., 419 Vanderbilt Road	Asheville
Kneedler, Mrs. W. Harding	Davidson
*Knight, Mrs. Floyd L., 115 Hillcrest Drive	Sanford
Knight, Mrs. Lee, 15-B Edgewood Apts.	Asheville
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Knox, Mrs. Joseph C., 1228 S. Live Oak Parkway	Wilmington
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Koonce, Mrs. Donald B., 1407 Oleander Drive	Wilmington
Kornegay, Mrs. Lemuel W.	Warrenton
Kornegay, Mrs. Robert D., 1418 Layfayette Avenue	Rocky Mount
Koseruba, Mrs. George M., 911 Country Club Blvd.	Wilmington
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Kroncke, Mrs. Fred G., 623 Cedar Street	Roanoke Rapids
Kurtz, Mrs. Elam	Jefferson
Ketner, Mrs. Fred Y., 185 Washington Lane	Concord
Kutscher, Mrs. George W., Elk Mountain Road	Asheville
Kutteh, Mrs. Hanna C., 230 N. Patterson Avenue	Statesville
Kyles, Mrs. N. Bruce, State Hospital	Goldsboro
Lackey, Mrs. Robert S., 3931 Shelton Place	Charlotte
Lacy, Mrs. George R., Jr., 184 Macon Avenue	Asheville
Lafferty, Mrs. John O., 2746 Hampton Avenue	Charlotte
Lafferty, Mrs. John W., 1055 Fourth Avenue Drive, N.W.	Hickory
Lahser, Mrs. Charles I., 1212 Crescent Avenue	Gastonia
Lake, Mrs. Ralph C., 4500 Ingleside Drive	Greensboro

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Lampley, Mrs. Charles G., Fairway Drive	Shelby
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Lang, Mrs. Andrew M., 106 N. Anderson Street	Morganton
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Langner, Mrs. Fred W., Maples Road	Southern Pines
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Lassiter, Mrs. Vernon C., 1818 Robin Hood Road	Winston-Salem
Lassiter, Mrs. Will H., Jr., 709 Sunset Drive	Smithfield
Latham, Mrs. Joseph R., 1301 National Avenue	New Bern
Laton, Mrs. James Franklin, 116 E. North Street	Albemarle
La Tourette, Mrs. Kenneth A.	Flat Rock
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Leath, Mrs. McLean B.	Archdale
LeBauer, Mrs. Maurice L., 1509 Madison Avenue	Greensboro
Ledbetter, Mrs. James M., 701 E. Washington Street	Rockingham
Lee, Mrs. Allen Henry	Selma
Lee, Mrs. F. Wayne, 1016 Maryland Avenue	Charlotte
Lee, Mrs. T. Leslie, Rountree Street	Kinston
Leeper, Mrs. William E., 378 N. Edgemont Avenue	Gastonia
LeGrand, Mrs. Robert H., 3411 Wilshire Drive	Greensboro
Lennon, Mrs. Hershel C., 911 Sunset Drive	Greensboro
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Lewis, Mrs. Clifford W., 322 Woodrow	High Point
Lewis, Mrs. John S., 362 N. Center Street	Hickory
Lewis, Mrs. Robert E., Finley Park	North Wilkesboro
*Lide, Mrs. Thomas N., 601 Barnsdale Road	Winston-Salem
*Ligon, Mrs. Harold B., 43 Beverly Apt.	Asheville
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Lilly, Mrs. William H., 901 N. Layton Avenue	Dunn
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Little, Mrs. Joseph R., Oak Road	Salisbury
*Littlejohn, Mrs. James T., 8 Cedarcliff Road	Asheville
*Littlejohn, Mrs. Thomas W., 2402 Forest Drive	Winston-Salem
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Lockhart, Mrs. Walter S., Jr., 805 Watts Street	Durham
Logan, Mrs. Frank W. Hicks, Chimney Rock Road	Rutherfordton
*Lohr, Mrs. Dermot	Lexington
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Long, Mrs. Glenn, 630 N. Main Street	Newton
Long, Mrs. T. Walter, N. Main Street	Newton
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*Long, Mrs. William M.	Mocksville
Long, Mrs. Zachary F., 214 Ann Street	Rockingham
Longino, Mrs. Frank H., 1010 Colonial Avenue	Greenville
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Lovill, Mrs. Robert J.	Mt. Airy
Lowenbach, Mrs. Hans, Old Apex Road, RFD	Durham
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Lymberis, Mrs. Marvin N., 2111 Radcliffe Avenue	Charlotte
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 Lynn, Mrs. James W., Jr., Trail 1, Burlington
 Grove Park
 Lyon, Mrs. Brockton R., Country Club Greensboro
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 *MacAlpine, Mrs. Orville D. Asheville
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 Center Avenue
 MacKay, Mrs. J. Calvin, 1805 Grace Wilmington
 Street
 MacLauchlin, Mrs. William T. Conover
 *McAdams, Mrs. Charles R., Sr., 31 W. Belmont
 Woodrow Avenue
 *McAdams, Mrs. Charles R., Jr., 1052 Charlotte
 Sedgfield Road
 McAlister, Mrs. Hugh A., Riverside Lumberton
 Drive
 McArn, Mrs. Hugh Monroe, Anson Laurinburg
 Avenue
 *McBee, Mrs. Paul T., 503 Claremont Marion
 Avenue
 *McBryde, Mrs. Angus M., E. Forest Durham
 Hills Blvd.
 McCain, Mrs. John L., 1122 W. Nash Wilson
 Street
 McCain, Mrs. Walkup K., 800 Sunset High Point
 Drive
 McCall, Mrs. W. Herbert, Country Club Asheville
 Road
 *McCall, Mrs. William, Jr., 508 Walker Winston-Salem
 Court
 McCarty, Mrs. R. Leeves, 843 Hempstead Charlotte
 Place
 McClees, Mrs. Edward C. Elm City
 McClelland, Mrs. Joseph O. Maxton
 McClure, Mrs. George Young, 1611 Pugh Fayetteville
 Street
 McConnell, Mrs. Harvey R., 1119 Cumberland Gastonia
 Avenue
 *McCoy, Mrs. Joseph B., Jr., 2026 Sharon Charlotte
 Lane
 McCracken, Mrs. Joseph P., 126 Pinecrest Durham
 Road
 McCracken, Mrs. Marvin H., 28 Griffing Asheville
 Blvd.
 McCutcheon, Mrs. Frank, Milford Salisbury
 Hills
 McDonald, Mrs. Lester B., Brevard Hendersonville
 Road
 McDowell, Mrs. Harold C., 200 Arbor Winston-Salem
 Road
 McDowell, Mrs. Roy H., 20 Myrtle Belmont
 Street
 McEachern, Mrs. Duncan R., 1915 Wilmington
 Hydrangea Pl.
 McElrath, Mrs. Percy J., 2736 Toxey Raleigh
 Drive
 McFadyen, Mrs. Oscar L., Jr., 524 Valley Fayetteville
 Road
 McGavran, Mrs. Edward G., Greenwood Chapel Hill
 Road
 McGee, Mrs. Julian M., 811 N. Elm Greensboro
 Street
 McGimsey, Mrs. James F., Jr., Edgewood Morganton
 Street
 McGowan, Mrs. Claudius Plymouth
 *McGowan, Mrs. Joseph F., 303 Vanderbilt Asheville
 Road
 McGrath, Mrs. Frank B., 212 E. 17th Lumberton
 Street
 McGuffin, Mrs. William C., 52 Forest Asheville
 Road
 McIntosh, Mrs. Archibald N. Marion
 McIntosh, Mrs. Henry D., 1807 Hillcrest Durham
 Drive
 McKay, Mrs. Clinton H., 204 Wales Charlotte
 Avenue
 McKay, Mrs. Hamilton W., 2926 Belvedere Charlotte
 Avenue
 McKay, Mrs. Robert W., 444 Eastover Charlotte
 Road
 McKee, Mrs. John S., Jr., State Morganton
 Hospital
 McKee, Mrs. Lewis M., 3633 Hope Durham
 Valley Road
 McKeel, Mrs. Millard F., 7½ Lone Pine Asheville
 Road
 McKeithan, Mrs. Murdock Ritchie Laurinburg
 McKenzie, Mrs. B. Whitehead, 407 Salisbury
 Mocksville Avenue
 McKenzie, Mrs. Edward, 329 Summitt Salisbury
 Avenue
 McKenzie, Mrs. Wayland Nash, N. Tenth Albemarle
 Street
 McKinnon, Mrs. William J., 253 W. Wadesboro
 Wade Street
 McKnight, Mrs. Roy B., 2343 Charlotte
 Forest Drive
 McLaurin, Mrs. Daniel A. Dobson
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 McLean, Mrs. E. Kenneth, 1110 Queens Charlotte
 Road, W.
 McLean, Mrs. Harry H., III Clarkton
 McLean, Mrs. James W., 117 DeVane Fayetteville
 Street
 McLendon, Mrs. Walter James, Oakboro
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 McLeod, Mrs. John C., Jr., 707 Pou Goldsboro
 Street
 McLeod, Mrs. W. Leslie, 1504 Biltmore Charlotte
 Drive
 McLeod, Mrs. William Louis, Main Norwood
 Street
 McManus, Mrs. Hugh F., Sr. Matthews
 McManus, Mrs. Hugh F., Jr., 3331 White Raleigh
 Oak Road
 McMillan, Mrs. James F., 907 Live Oak Wilmington
 Parkway
 *McMillan, Mrs. Robert L., 718 Arbor Winston-Salem
 Road
 *McMillan, Mrs. Robert M., Massachusetts Southern Pines
 Avenue, Ext.
 McMillan, Mrs. Roscoe D. Red Springs
 McNeill, Mrs. Claude A., Jr. Elkin
 *McNeill, Mrs. James H., Pilsen North Wilkesboro
 Street
 McNiel, Mrs. Thomas L. Wilkesboro
 McPheeters, Mrs. Samuel B., 307 Linwood Goldsboro
 Avenue
 McPherson, Mrs. Charles W., 422 Burlington
 Fountain Place
 McPherson, Mrs. Harry T., 875 Louise Durham
 Circle
 McPherson, Mrs. Samuel D., Jr., 29 Oak Durham
 Drive
 McRae, Mrs. Marvin E., 121 Beverly Greensboro
 Pl.
 McWhorter, Mrs. Robert L., 905 Martin Concord
 Drive
 Mabe, Mrs. Paul Madison
 Macatee, Mrs. George, Jr., Inglewood Asheville
 Road
 Mackie, Mrs. George C., Box 927 Wake Forest
 Macon, Mrs. Gideon H. Warrenton
 Maddrey, Mrs. M. Crocker, 610 Franklin Roanoke Rapids
 Street
 Mahaffee, Mrs. W. Collins, 805 Castlewood Greensboro
 Drive
 Major, Mrs. Richard S., 816 Fourth Hendersonville
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 *Maness, Mrs. A. Kelly, 1918 Granville Greensboro
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Martin, Mrs. Sidney A., 914 Lake Boone Trail	Raleigh
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Mason, Mrs. Manly	Newport
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*Matthews, Mrs. Hugh A.	Canton
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Matthews, Mrs. Vann M., 3010 Central Avenue	Charlotte
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*May, Mrs. Harvey C., 1136 Berkeley Avenue	Charlotte, 3
Maybin, Mrs. Richard M.	Lawndale
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Meadows, Mrs. Joseph H., 108 Clyde Avenue	Wilson
*Means, Mrs. Robert L., 122 Revere Road	Winston-Salem
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Mease, Mrs. Willis E.	Richlands
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Menzies, Mrs. Henry H., 714 Oaklawn Avenue	Winston-Salem
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Merritt, Mrs. John H., Barnett Avenue	Roxboro
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Messerschmidt, Mrs. H. Carl, 721 Gatewood Avenue	High Point
*Metcalf, Mrs. Lawrence E., Chunns Cove Road	Asheville
Mewborn, Mrs. John M.	Farmville
Meyer, Mrs. George J., 535 Gatewood Avenue	High Point
*Milham, Mrs. Claude G., 405 Minturn Avenue	Hamlet
Millender, Mrs. Charles W., 230 Pearson Drive	Asheville
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Miller, Mrs. George R., 902½ Edgewood Circle	Gastonia
*Miller, Mrs. H. Rankin, Box 967	Black Mountain
Miller, Mrs. Ira Ben, 1007 Westwood	High Point
Miller, Mrs. Joseph T., Armstrong Park Road	Gastonia
Miller, Mrs. Oscar L., 314 Fenton Place	Charlotte
*Miller, Mrs. Robert C., 414 Harvie Street	Gastonia
Miller, Mrs. Robert Evans, 1101 Bolling Road	Charlotte
Miller, Mrs. Robert P., 1223 Providence Road	Charlotte
Miller, Mrs. Walton H., Jr., 1606 E. Mulberry Street	Goldsboro
Miller, Mrs. Warren E., 502 Pinkney Street	Whiteville
Milliken, Mrs. James S., Box 55	Southern Pines
Millman, Mrs. Theodore H.	Spray
Millns, Mrs. Dale T., 1316 National Avenue	New Bern
Mills, Mrs. Charles R., 100 Elmwood Drive	Greensboro
Mills, Mrs. James C., J Street	North Wilkesboro
Mills, Mrs. Wardell H., 1202 Country Club Drive	Greensboro
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Misenheimer, Mrs. Edd A., Washington Lane	Concord
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Mitchell, Mrs. Landis P., 202 Elmore	Spindale
Mitchell, Mrs. Roy C.	Mt. Airy
Mitchener, Mrs. James Samuel, Jr.	Laurinburg
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*Mock, Mrs. Frank L., Route 8	Lexington
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Monroe, Mrs. Edward W., 215 Library Street	Greenville
Monroe, Mrs. Lance T., 218 N. Union Street	Concord
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Montgomery, Mrs. Wayne S., 10 Blackwood Road	Asheville

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Moon, Mrs. Richard, 49 Plymouth Circle	Asheville	*Murphy, Mrs. G. Westbrook, 22 Hampstead Road	Asheville
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Moore, Mrs. D. Forrest, Box 136	Shelby	*Murray, Mrs. Harold Lafayette, 519 East Street	Albemarle
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Moore, Mrs. Horace G., Jr.	Wilmington	*Nance, Mrs. Charles Lee, 1825 E. 7th Street	Charlotte
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Moore, Mrs. John A., 308 E. Hendrix Street	Greensboro	Nance, Mrs. John W., 410 Powell Street	Clinton
*Moore, Mrs. Julian A., 34 Hilltop Road	Asheville	Nanzetta, Mrs. Leonard, 2356 Rosewood Avenue	Winston-Salem
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Moore, Mrs. Laurie W.	Beaufort	Nash, Mrs. Thomas P., 111, 306 E. Colonial	Elizabeth City
Moore, Mrs. Pierce J., Jr., Mt. Sanatorium	Fletcher	Naumoff, Mrs. Philip, 2320 Croydon Road	Charlotte
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Moore, Mrs. Roy H.	Canton	*Nelson, Mrs. William H., Cooper Drive	Clinton
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*Morris, Mrs. Leslie M., 1122 S. Edgemont Avenue	Gastonia	Nicholson, Mrs. Henry H., Jr., 1822 Linewood Road	Charlotte
Morris, Mrs. Marshall G., Jr., 404 S. Mendenhall	Greensboro	Nicholson, Mrs. Robert W., 809 Windsor Drive	Wilmington
Morris, Mrs. Rae H., 67 Louise Avenue	Concord	Nicholson, Mrs. William McN., 824 Anderson Street	Durham
Morrison, Mrs. Robert H., 331 Fairfield Road	Fayetteville	Nifong, Mrs. Frank M.	Clemmons
*Morrison, Mrs. Roger W., 65 Sunset Parkway	Asheville	*Noel, Mrs. George T., 312 West Avenue	Kannapolis
Morton, Mrs. L. Thomas, 513 S. Cedar Street	Lincolnton	Nolan, Mrs. James O., Cannon Blvd.	Kannapolis
Morton, Mrs. Leslie Bryant	Colerain	Nolan, Mrs. Paul V., 304 S. Sims Street	Kings Mountain
Moss, Mrs. G. Oren, Route 1	Rutherfordton	Norburn, Mrs. Russell L., 54 Hilltop Road	Asheville
Moss, Mrs. Paul	Hudson		
Muirhead, Mrs. Samuel J., Veterans Hospital	Salisbury		
Mullen, Mrs. Malcolm P., State Hospital	Morganton		
*Mumford, Mrs. Ander M.	Winterville		
Mundorf, Mrs. George, 1350 Dresden Drive	Charlotte		

*Norfleet, Mrs. Charles M., Jr., 2566 Warwick Road	Winston-Salem
Norment, Mrs. William B., 702 Woodland Drive	Greensboro
Norris, Mrs. Charles B., 1039 Arosa Avenue	Charlotte
North, Mrs. Edward H., Jr., Riverview Crescent	Elizabeth City
*Norton, Mrs. J. W. Roy, 2129 Cowper Drive	Raleigh
Nowlan, Mrs. Fagg B.	Pleasant Garden
Nowlin, Mrs. G. Preston, 946 Bromley Road	Charlotte
O'Briant, Mrs. Albert L., P.O. Box 245	Raeford
Odom, Mrs. Guy L., 2813 Chelsea Circle, Hope Valley	Durham
*Odom, Mrs. Robert E., 99 Evelyn Place	Asheville
Odom, Mrs. Robert T., 1908 Virginia Road	Winston-Salem
Oehlbeck, Mrs. Luther W. F., Jr., 1820 Colonial	Greensboro
Oelrich, Mrs. August M., 613 Palmer Drive	Sanford
Offutt, Mrs. Vernon D., 910 Rountree Street	Kinston
Ogburn, Mrs. Herbert H., 1806 West Market	Greensboro
Ogburn, Mrs. Leon N., 1623 Canterbury Road	Raleigh
Ogburn, Mrs. Paul L., 102 N. Patterson Street	Statesville
Ogle, Mrs. Ben C., 525 Hertford	Raleigh
Olive, Mrs. P. W., 1322 Woodland Drive	Fayetteville
Oliver, Mrs. Jim U., 2624 Fairview Road	Raleigh
Oliver, Mrs. Joseph A.	Rockwell
O'Quinn, Mrs. E. Nelson, 1810 Princess Street	Wilmington
Orgain, Mrs. Edward S., 3321 Devon Road, Hope Valley	Durham
Ormand, Mrs. John W., Box 397	Monroe
*Ormond, Mrs. Allison L., 108 Sixth Avenue Pl., N.W.	Hickory
Orr, Mrs. Charles C., 179 Montford	Asheville
Osborne, Mrs. Joseph E.	Rosman
Outland, Mrs. Robert B.	Rich Square
Outlaw, Mrs. Jackson Kent, 808 Pee Dee Avenue	Albemarle
Owen, Mrs. Duncan S., 201 Oakridge Avenue	Fayetteville
Owen, Mrs. G. Frank, Jr., 222 W. Trinity Avenue	Durham
Owen, Mrs. John F., 2631 Fairview Road	Raleigh
Owen, Mrs. Robert H.	Canton
*Owen, Mrs. W. Boyd	Waynesville
*Owsley, Mrs. Lawrence H., Highland Park	Boone
*Pace, Mrs. Karl B., 404 Summit Street	Greenville
Pace, Mrs. Samuel E., 1617 Market Street	Wilmington
Padgett, Mrs. Charles K., Cleveland Springs	Shelby
Padgett, Mrs. Philip G., 605 N. Piedmont	Kings Mountain
Page, Mrs. Ernest B., Jr., 2207 Wheeler Road	Raleigh
*Page, Mrs. George D., 1855 Cassamia Pl.	Charlotte
Painter, Mrs. W. Watson, 920 N. Main Street	Mooreville
*Palmer, Mrs. Yates S.	Valdese
Palmer, Mrs. Wesley C., Jr., 440 Ridgeway Avenue	Statesville
Papineau, Mrs. Alban	Plymouth
Parham, Mrs. Asa R., 712 Hillcrest Road	High Point
Parker, Mrs. John Wesley, Jr.	Seaboard
Parker, Mrs. Oscar L., 706 College Street	Clinton
Parker, Mrs. Roy T., 111 Pinecrest Road	Durham
Parker, Mrs. Samuel L., Jr., 1202 Harding Avenue	Kinston
Parker, Mrs. Wade T., 717 Hay Street	Fayetteville
Parkinson, Mrs. Thomas W., 388 N. Edgemont Avenue	Gastonia
Parks, Mrs. W. Craig, Emerywood Estates	High Point
*Parrott, Mrs. Frank S., 322 Mocksville Avenue	Salisbury
Parsons, Mrs. Lacy J., Jr., 2404 Rowland Avenue	Lumberton
Parsons, Mrs. William H.	Ellerbe
*Paschal, Mrs. George W., Jr., 3334 Alamance Road	Raleigh
Paschold, Mrs. John Henry, Park Lane	Albemarle
Pate, Mrs. Archibald H., 110 S. Oleander Avenue	Goldsboro
Pate, Mrs. J. Frank	Canton
Pate, Mrs. J. Lloyd	Pembroke
Pate, Mrs. James G.	Gibson
Pate, Mrs. Marion B., Jr.	St. Pauls
Pate, Mrs. William H.	Pikeville
Patrick, Mrs. Simmons I., 309 Harding Avenue	Kinston
Patterson, Mrs. Carl N., 3930 Plymouth Road, Hope Valley	Durham
Patterson, Mrs. F. M. Simmons, 1507 Tryon Road	New Bern
Patterson, Mrs. Fred G., 511 Senlac Road	Chapel Hill
*Patterson, Mrs. Hubert C., Pittsboro Road	Chapel Hill
Patterson, Mrs. Joseph H.	Broadway
Patterson, Mrs. Thomas H.	Colerain
*Patton, Mrs. John D.	Asheville
*Patton, Mrs. William H., Jr., Terrace Pl.	Morganton
*Payne, Mrs. John A., III	Sunbury
*Peacock, Mrs. Erle E., Jr.	Chapel Hill
Peak, Mrs. Latham Conrad, 409 Lafayette Street	Clinton
Pearse, Mrs. Richard L., Route 1, S. Lowell Road	Durham
Pearson, Mrs. Hugh O., Box 26	Pinetops
Pearson, Mrs. John K., Pearson Street	Apex
Peasley, Mrs. Edward D., 10 Westchester Drive	Asheville
Peck, Mrs. Harold A., 425 Dogwood Lane	Southern Pines
Peele, Mrs. James C., 1208 Perry Park Drive	Kinston
Peeler, Mrs. Forrest E.	Maiden
Pender, Mrs. John R., 701 Ashworth Road	Charlotte
Penick, Mrs. George D., 1 Penick Lane	Chapel Hill
Pennington, Mrs. Glenn W., 2201 Hastings Drive	Charlotte
Perrin, Mrs. Thomas S., Jr., 1825 Jamestown Drive	Charlotte
Perritt, Mrs. J. Olin, 7 Lagoon Drive	Wilmington
*Perry, Mrs. D. Russell, Sr., 1120 Eighth Street	Durham
Perry, Mrs. D. Russell, Jr., 746 Sylvan Road	Winston-Salem

Perry, Mrs. Glenn G., 702 Sunset Drive	High Point	Pott, Mrs. Walter G. H., 314 Rutledge Road	Greenville
Perry, Mrs. Henry B., Jr., 100 E. Brentwood	Greensboro	*Powell, Mrs. Albert H., 1632 University Drive	Durham
Perry, Mrs. S. Paul, 3602 Rugby Rd., Hope Valley	Durham	Powell, Mrs. Charles J., 1128 Magnolia Pl.	Wilmington
Perryman, Mrs. Olin C., Jr., 105 E. Clemmons Road	Winston-Salem	Powell, Mrs. E. Charles, Jr., 804 E. Park Avenue	Goldsboro
*Persons, Mrs. Elbert L., 723 Anderson Street	Durham	Powell, Mrs. Jack, 6 Violet Hill Circle	Asheville
Peters, Mrs. A. Richard, Jr., Washington Park	Washington	*Powell, Mrs. W. Ernest, Jr.	Mars Hill
Peters, Mrs. William A., Jr., 206 S. Road	Elizabeth City	Powell, Mrs. William F., 62 Gertrude Pl.	Asheville
Pettus, Mrs. William H., Jr., 1901 Sterling Road	Charlotte	Powers, Mrs. Earl J., 2660 Robin Hood Road	Winston-Salem
Phelps, Mrs. James S., Jr., Box 5	Troy	Powers, Mrs. Frank P., 2529 White Oak Road	Raleigh
Phelps, Mrs. John M.	Creswell	*Powers, Mrs. John A., 2035 Sherwood Road	Charlotte
Phifer, Mrs. Edward W., Sr., 303 W. Union Street	Morganton	Prefontaine, Mrs. J. Edouard, 901 Dover Road	Greensboro
Phillips, Mrs. Charles A. Speas, 525 E. Massachusetts Avenue	Southern Pines	*Pressly, Mrs. C. Lowry, 1863 Cassamia Pl.	Charlotte
Phillips, Mrs. Ernest N., Finley Park	North Wilkesboro	Pressly, Mrs. David L., 576 Brookdale Blvd.	Statesville
Phillips, Mrs. William A., Greenville Sound	Wilmington	Pressly, Mrs. James L., Ingleside, Route 1	Statesville
Pickard, Mrs. H. Mack, 5002 Oleander Drive	Wilmington	Preston, Mrs. John Z., Hickorywood	Tryon
Pickrell, Mrs. Kenneth L., 3 Sylvan Road	Durham	Prince, Mrs. John S.	Emporia, Va.
Pigford, Mrs. Robert T., 155 Colonial Drive	Wilmington	Printz, Mrs. Don R., 340 Midland Drive	Asheville
Pipes, Mrs. David McK., 1 Fairmont Road	Asheville	*Pritchard, Mrs. George L.	Black Mountain
Pishko, Mrs. Michael T., Midland Road	Pinehurst	Pritchett, Mrs. Newton G., 3034 Lewis Farm Road	Raleigh
Pittman, Mrs. Alfred R., Jr., 2304 Rowland Avenue	Lumberton	Proctor, Mrs. Richard C., Graylyn	Winston-Salem
Pittman, Mrs. Dorn C., Alamance Acres	Burlington	Pruitt, Mrs. George C., Lancaster Lane	Rockingham
Pittman, Mrs. Malory A., Raleigh Road	Wilson	*Pugh, Mrs. Charles H., 610 S. Lee Street	Gastonia
Pittman, Mrs. Raymond L., Sr., 645 Hay Street	Fayetteville	Pulliam, Mrs. B. E., Robin Hood Road	Winston-Salem
Pittman, Mrs. William A., 118 Stedman Avenue	Fayetteville	Pumphrey, Mrs. Albert F., Box 627	Elizabethtown
Pitts, Mrs. William R., 429 Eastover Road	Charlotte	Putney, Mrs. Robert H., Jr.	Elm City
Piver, Mrs. James D., 202 E. Bayshore Blvd.	Jacksonville	Queen, Mrs. Hugh O., Rollins Avenue	Hamlet
Piver, Mrs. William Crawford, Jr., Washington Park	Washington	*Query, Mrs. Robert Z., Jr., 1901 Matheson Avenue	Charlotte
Pixley, Mrs. Roland T., 1020 Habersham Drive	Charlotte	Quickel, Mrs. John C., 1140 S. Edgemont Avenue	Gastonia
Plonk, Mrs. George W., 2607 St. Mary's Street	Raleigh	Quinn, Mrs. Clifton L.	LeGrange
Plyler, Mrs. Ralph J., 611 Mocksville Avenue	Salisbury	Rabil, Mrs. William E., Buena Vista Road	Winston-Salem
Podger, Mrs. Kenneth A., 217 E. Markham Avenue	Durham	Rabold, Mrs. Bernard L., Dogwood Hills	Newton
Pollock, Mrs. Raymond, 509 Middle Street	New Bern	Rabold, Mrs. Leonard J., 109 W. Newlyn Street	Greensboro
Pool, Mrs. Bennett B., 2301 Buena Vista Road	Winston-Salem	Raby, Mrs. William T., 2121 Bucknell Avenue	Charlotte
Poole, Mrs. Marvin B., 500 S. Layton Avenue	Dunn	Rachlin, Mrs. Stanton A., Veteran's Hospital	Fayetteville
Poole, Mrs. R. Frank, Jr., 1631 St. Mary's Street	Raleigh	*Radford, Mrs. Howard L., 3 Stimson	Cliffside
Pope, Mrs. Henry T., 304 E. 17th Street	Lumberton	Raiford, Mrs. Fletcher L., Haywood Forest	Hendersonville
Pope, Mrs. Robert C., 404 Monticello Drive	Wilson	*Raiford, Mrs. Theodore S., 30 Cedarc Cliff Road	Asheville
Porter, Mrs. Richard A., Haywood Forest	Hendersonville	Rainey, Mrs. William T., Sr., 1410 Ft. Bragg Road	Fayetteville
*Poteat, Mrs. Hubert M., Jr., 422 Church Street	Smithfield	Ramsaur, Mrs. Jackson T., 1011 Fairfield Drive	Gastonia
		Ramsay, Mrs. J. Graham, Washington Park	Washington
		Rand, Mrs. Cecil H.	Fremont
		Raney, Mrs. R. Beverly, N. C. Memorial Hospital	Chapel Hill
		Rankin, Mrs. R. Pinkney, Jr., 1822 Princeton Avenue	Charlotte

Rankin, Mrs. Richard B., 33 Marsh Street	Concord	Roach, Mrs. Leonard H., Cherokee Road	Asheville
*Rankin, Mrs. Richard E., Mt. Holly-Belmont Road	Mt. Holly	Roach, Mrs. Robert B., 502 Kentwood Cl.	Lenoir
Ranson, Mrs. J. Lester, Sr., 620 Hermitage Court	Charlotte	Robbins, Mrs. Grover, 113 Crafton Street	Winston-Salem
Ranson, Mrs. J. Lester, Jr., 2819 Glendale Road	Charlotte	Robbins, Mrs. Jack G., 930 Lambeth Circle	Durham
Ranson, Mrs. William A., 620 Hermitage Road	Charlotte	*Roberson, Mrs. Edward L.	Tarboro
*Raper, Mrs. James S., 16 St. Dunstons Circle	Asheville	*Roberson, Mrs. R. Stuart	Waynesville
Rapp, Mrs. Ira H., 1922 Beverly Drive	Charlotte	Roberts, Mrs. B. Watson, 1503 Pettigrew Street	Durham
Rathbun, Mrs. Lewis S., 46 Forest Road	Asheville	Roberts, Mrs. Louis C., 3920 Plymouth Road	Durham
Ray, Mrs. Frank L., 2021 Dilworth Road, W.	Charlotte	Roberts, Mrs. R. Winston, 2723 Canterbury Trail	Winston-Salem
Ray, Mrs. John B.	Leaksville	Roberts, Mrs. William McK., Babington Heights	Gastonia
Ray, Mrs. R. Clyde	West Jefferson	Robertson, Mrs. Carroll B.	Jackson
*Rayle, Mrs. Wiley W.	Maiden	Robertson, Mrs. Edwin M., 1934 Hermitage Ct.	Durham
Redwine, Mrs. J. Dan	Lexington	Robertson, Mrs. J. Newton, Sr., 807 Hay Street	Fayetteville
*Reece, Mrs. John C., Riverside Drive	Morganton	Robertson, Mrs. James M.	Harmony
Reesser, Mrs. Archibald W.	Leaksville	Robertson, Mrs. John K.	Pembroke
Reeves, Mrs. George F., Morehead Street	Morganton	*Robertson, Mrs. L. Harvey, Country Club	Salisbury
*Reeves, Mrs. Jerome L.	Canton	Robertson, Mrs. Leon W., Box 1294	Rocky Mount
Reeves, Mrs. Robert J., 920 Anderson Street	Durham	Robertson, Mrs. Logan T., 27 Fairmont Terrace	Asheville
Register, Mrs. John F., 803 Magnolia Street	Greensboro	Robinson, Mrs. Charles W., 1114 Belgrave Pl.	Charlotte
Reid, Mrs. Charles H., Jr., 710 Oaklawn Avenue	Winston-Salem	Robinson, Mrs. Joe, 705 McDonald Avenue	Hamlet
Reid, Mrs. James W.	Lowell	Robinson, Mrs. John D., Box 207	Wallace
Reid, Mrs. Leary, 301 Highland Avenue	Kinston	Rodda, Mrs. John S.	Andrews
Reid, Mrs. Ralph C.	Pineville	Rodgers, Mrs. William D.	Warrenton
Reid, Mrs. William J., 1302 Summit Street	Greensboro	Rodman, Mrs. Clark, Riverside	Washington
*Reinhardt, Mrs. James F., 646 W. Park Drive	Lincolnton	Rodman, Mrs. Olzie Clark, 519 W. Main Street	Washington
Reynolds, Mrs. Ernest H.	Reidsville	Rogers, Mrs. Arthur M., 2115 Pinewood Cl.	Charlotte
Reynolds, Mrs. Frank R., 1210 Fairway Drive	Wilmington	Rogers, Mrs. James R., 130 Hillsboro Street	Raleigh
Rhodes, Mrs. James K., 3350 Alamance Road	Raleigh	*Rogers, Mrs. Max P., 1112 Rolling Road	High Point
Rhodes, Mrs. James S., Jr., Rhodesia Place	Williamston	Rogers, Mrs. Seymour S., 1503 Alandale Road	Greensboro
*Rhodes, Mrs. John S., 2704 Vanderbilt Avenue	Raleigh	*Rogers, Mrs. Stanley James	Butner
Rhyne, Dr. Marie Britt, 1102 Riverside Drive	Lumberton	*Romeo, Mrs. Bruno J., Laurel Park	Hendersonville
Rhyne, Mrs. Samuel A., 632 Greenway Drive	Statesville	*Romm, Mrs. William H., Shingle Landing Road	Moyock
Rice, Mrs. A. Douglas, 708 Louise Circle	Durham	Rose, Mrs. A. Hewitt, Jr., 723 Lake Boone Trail	Raleigh
*Rice, Mrs. Robert S., Palaside Drive	Concord	Rose, Mrs. Abraham Hewitt, 543 Hancock Street	Smithfield
Richardson, Mrs. Ernest C., Jr., 1606 Lucerne Way	New Bern	Rose, Mrs. I. Woodall, Jr., 1316 Sunset Avenue	Rocky Mount
*Richardson, Mrs. Frank H.	Black Mountain	*Rose, Mrs. James W.	Pikeville
Richardson, Mrs. James J., Prince Street	Laurinburg	Ross, Mrs. Donald M., 418 Fountain Pl.	Burlington
Richardson, Mrs. William P., Box 758	Chapel Hill	Ross, Mrs. Otho B., Jr., 2144 Princeton Avenue	Charlotte
Richman, Mrs. Samuel, 3902 Madison Avenue	Greensboro	Ross, Mrs. W. Richard, 736 E. Oakwood Avenue	Albemarle
Riddle, Mrs. Harry D., 619 W. Hillcrest Avenue	Gastonia	Rosser, Mrs. John H., 125 N. Race Street	Statesville
Ridge, Mrs. Clyde F., 609 Colonial Drive	High Point	*Rousseau, Mrs. James P., 808 Oaklawn Avenue	Winston-Salem
Riggs, Mrs. Millard M., W. Union Street	Morganton	Rowe, Mrs. Charles Roy, Jr., 408 N. Center Street	Statesville
Rippy, Mrs. William D., 272 N. Graham-Hopedale Road	Burlington	*Royal, Mrs. Benjamin F.	Morehead City
Ritchie, Mrs. John A., 209 W. Woodridge Drive	Durham	*Royal, Mrs. Donnie M.	Salemberg
		Royster, Mrs. Chauncey L., 2607 Fairview Road	Raleigh

Royster, Mrs. J. Dan, Box 68	Benson	Seigman, Mrs. Edwin L., 722 Falls Road	Rocky Mount
Royster, Mrs. Thomas S., Jr.	Henderson	*Selby, Mrs. William E., 1126 Belgrave Pl.	Charlotte
Ruark, Mrs. Robert J., 3132 Sussex Road	Raleigh	Semans, Mrs. James H., 1415 Bivins Street	Durham
Rubin, Mrs. Adrian S., Nutbush Road	Greensboro	Senter, Mrs. W. Jeff, 2330 Churchill Road	Raleigh
*Rubin, Mrs. M. Harvey, 1705 Efland Drive	Greensboro	Severn, Mrs. Henry D., 4 Pine Tree Road	Asheville
Rudd, Mrs. Paul D.	Reidsville	Shackelford, Mrs. Robert W., 201 W. Pollock Street	Mt. Olive
Ruffin, Mrs. Julian M., 816 Anderson Street	Durham	Shafer, Mrs. Irving E., Sr., 230 W. Thomas Street	Salisbury
Rundles, Mrs. R. Wayne, 132 Pinecrest Road	Durham	Shafer, Mrs. Irving E., Jr., 618 Margaret Drive	Statesville
Russell, Mrs. Jesse M.	Canton	Shaffner, Mrs. Louis deS. 818 Sylvan Road	Winston-Salem
*Russell, Mrs. Phillip E., 6 Beverly Apts.	Asheville	*Shaia, Mrs. William H., 1419 Independence Blvd.	Charlotte
Russell, Mrs. William Marler, 1 Lone Pine Road	Asheville	Shannon, Mrs. George Ward, Forrest Hills	Rockingham
Sadler, Mrs. Ralph C., 106 S. Madison Street	Whiteville	Sharpe, Mrs. Frank A., 111 E. Hendrix Street	Greensboro
Sale, Mrs. Charles S., 1151 Country Club Road	Wilmington	Shaver, Mrs. William Trantham, 1105 Pee Dee Avenue	Albemarle
Saleeby, Mrs. Richard G., 2307 Churchill Road	Raleigh	Shaw, Mrs. John A., R.F.D. 4	Buena Vista
Salle, Mrs. George F., Washington Park	Washington	Shaw, Mrs. Lloyd R., 222 N. Oak Street	Statesville
Salley, Mrs. E. McQueen, 305 Crescent Avenue	Hendersonville	Shelburne, Mrs. Palmer A., 2311 Princess Ann Street	Greensboro
Salter, Mrs. Theodore	Beaufort	Shepard, Mrs. Karl, 813 Hillcrest Drive	High Point
Sample, Mrs. Robert C., Dana Road	Hendersonville	Sheridan, Mrs. Robert J., 1320 Sycamore Street	Rocky Mount
Sanders, Mrs. Lee Hyman, 2502 Anderson Drive	Raleigh	Sherrill, Mrs. John F., 3326 Rugby Road, Hope Valley	Durham
Sanford, Mrs. Joseph A.	Leaksville	Shields, Mrs. William E.	Reidsville
Sanger, Mrs. Paul W., 1813 Providence Road	Charlotte	*Shifley, Mrs. Glen M., 217 Forest Hill Drive	Asheville
Santoe, Mrs. Juan J., 208 Pennsylvania Avenue	Winston-Salem	Shingleton, Mrs. William W., 1510 Carolina Avenue	Durham
Sardi, Mrs. Carl A., 4402 Cornell Avenue	Greensboro	Shinn, Mrs. G. Clyde	China Grove
Sargent, Mrs. Winston A. Y.	Burnsville	Shipley, Mrs. John L., 309 W. Church	Elizabeth City
Sarven, Mrs. James	Waynesville	Shirey, Mrs. John L., Route #4	Asheville
*Saunders, Mrs. Charles Lawrence, Jr., 714 Graham-Hopedale Road	Burlington	Shuford, Mrs. Jacob H., 1007—14th Ave. Drive, N.W.	Hickory
*Saunders, Mrs. John T., 29 Maywood Road	Asheville	Shuford, Mrs. Wade H., 1203 N. Gregson Street	Durham
Saunders, Mrs. S. Stewart, 1322 Greenway Drive	High Point	Shull, Mrs. William H., 2101 Matheson Avenue	Charlotte
Saunders, Mrs. Sheldon A.	Aulander	Sieker, Mrs. Herbert O., 2512 State Street	Durham
Savage, Mrs. Robert, 133 Revere Road	Winston-Salem	*Siewers, Mrs. Christian Fogle, 201 Churchill Drive	Fayetteville
Sawyer, Mrs. C. Glenn, 812 Sylvan Road	Winston-Salem	Sikes, Mrs. C. Henry, 1703 Friendly Road	Greensboro
Sawyer, Mrs. L. Everett, 712 W. Main	Elizabeth City	Sikes, Mrs. Walter A., State Hospital	Raleigh
Schafer, Mrs. Earl W., Emerywood Estates	High Point	*Silverton, Mrs. George, 502 W. 26th Street	Lumberton
*Schiebel, Mrs. H. Max, 1020 Anderson Street	Durham	Simmons, Mrs. Alexander W., 604 Glenwood Avenue	Burlington
Schlaseman, Mrs. Guy W., 819 Knox Street	Durham	Simons, Mrs. Claude E., Raleigh Road	Wilson
*Schoenheit, Mrs. Edward W., 25 Eastwood Road	Asheville	Simpson, Mrs. Paul E., 2612 Dover Road	Raleigh
Schoonover, Mrs. R. A., 2107 Lafayette Avenue	Greensboro	Simpson, Mrs. Thomas W., 763 Barnsdale Avenue	Winston-Salem
Schweizer, Mrs. Donald C., 2709 W. Market Street	Greensboro	Sinclair, Mrs. Carter A., 353—8th Street, N.W.	Hickory
Scott, Mrs. Alan F., Mocksville Road	Salisbury	*Sinclair, Mrs. L. Gordon, 3309 White Oak Road	Raleigh
Scott, Mrs. S. Floyd, Route 2	Burlington	Sinclair, Mrs. Robey T., Jr., Renovah Circle	Wilmington
Sealy, Mrs. Will C., 2232 Cranford Road	Durham	Singleton, Mrs. George C.	Clarkton
Sears, Mrs. Warren W., 2808 Avondale Avenue	Charlotte	*Singleton, Mrs. William V., Beverly Drive	Durham
Seear, Mrs. Torben, 1707 Fairfield Drive	Gastonia		

Sink, Mrs. Charles S., Sunset Drive	North Wilkesboro	*Snipes, Mrs. Richard D., 312 Valley Road	Fayetteville
Sinnett, Mrs. John F., 524 W. 8th Street	Newton	Snow, Mrs. Leo B., N. Anderson Street	Morganton
Siske, Mrs. Grady C.	Pleasant Garden	Sohmer, Mrs. M. Frank, Jr., Baptist Hospital	Winston-Salem
Skeen, Mrs. Leo B., 812 N. Main	Mooreville	Sommerville, Mrs. Lewis, Mt. Carmel Road	West Asheville
Skinner, Mrs. Benjamin S., 418 S. Duke Street	Durham	*Sowers, Mrs. Roy G., 2122 Lee Avenue	Sanford
Skinner, Mrs. Louis C., E. 5th Street	Greenville	Spangler, Mrs. Harold B., 2315 Lawndale Drive	Greensboro
Slagle, Mrs. Thomas D., Box 456	Sylva	Sparrow, Mrs. Harry W., 508 S. Holden Road	Greensboro
Slate, Mrs. J. Esmond, 1051 Rockford Road	High Point	*Spaugh, Mrs. Earle, 2836 Selwyn Avenue	Charlotte
Slate, Mrs. John S., 1215 W. First Street	Winston-Salem	Speas, Mrs. Dallas C., 2598 Reynolda Road	Winston-Salem
Slate, Mrs. Marvin L., 100 Brantley Circle	High Point	Speas, Mrs. W. Paul, Sr., 437 Springdale Avenue	Winston-Salem
Sloan, Mrs. Allen B., 745 N. Main Street	Mooreville	Speas, Mrs. William P., Jr., 2915 West First Street	Winston-Salem
*Sloan, Mrs. David B., 1116 Magnolia Pl.	Wilmington	Spencer, Mrs. Frederick B., Jr., 117 Lilly Avenue	Salisbury
Sloan, Mrs. Henry L., Sr., 2208 Sherwood Avenue	Charlotte	Spencer, Mrs. Richard E., 1302 Gracewood Street	Greensboro
Sloan, Mrs. Henry L., Jr., 154 Canterbury Drive	Charlotte	Spencer, Mrs. William G., Jr., 301 West End Avenue	Wilson
Sloop, Mrs. Eustace H.	Crossnore	Spikes, Mrs. Norman O., 1023 W. Markham Avenue	Durham
*Sluder, Mrs. Fletcher S., Chunns Cove Road	Asheville	Sprunt, Mrs. William H., Jr., 1931 Virginia Road	Winston-Salem
Sluder, Mrs. Harold M., 2120 Princeton Avenue	Charlotte	Sprunt, Mrs. William H., III, Morgan Creek Road	Chapel Hill
Small, Mrs. Victor R., 719 College Street	Clinton	Squire, Mrs. Peter W.	Emporia, Va.
Smart, Mrs. G. Ford, 58 St. Dunstons Road	Asheville	*Squires, Mrs. Claude B., 2128 Malvern Road	Charlotte
Smedberg, Mrs. George A., 116 N. Ireland Street	Burlington	*Stallard, Mrs. Sam K.	Reidsville
Smeltzer, Mrs. Dave H., 1832 Camp Green Avenue	Charlotte	Stanfield, Mrs. Elwin, 516 Country Club Drive	Fayetteville
*Smerzrak, Mrs. John J., 209 E. Corban Street	Concord	Stanfield, Mrs. William W., S. Layton Avenue	Dunn
Smith, Mrs. A. Heyward, Jr.	Waynesville	Stanley, Mrs. Sherburn M.	Enka
Smith, Mrs. Albert G., 826 Louise Circle	Durham	Stanly, Mrs. John H.	Woodland
Smith, Mrs. C. Gordon	Snow Hill	Stanton, Mrs. Allie McLeod, 8 Westover Heights	Edenton
Smith, Mrs. Claiborne T., 208 Hickory Street	Rocky Mount	Starling, Mrs. Howard M., 123 Pine Valley Road	Winston-Salem
*Smith, Mrs. Everette D.	Candler	Starling, Mrs. W. Plato	Roseboro
Smith, Mrs. Franklin C., 2219 Radcliffe Avenue	Charlotte	*Starr, Mrs. H. Frank, Sr.	Sedgefield
Smith, Mrs. Harold B., D Street	North Wilkesboro	Stead, Mrs. Eugene A., Jr., 2122 Myrtle Drive	Durham
Smith, Mrs. J. McNeill	Rowland	Stegall, Mrs. John T., 327 Oakwood Drive	Statesville
Smith, Mrs. James J., 1204 E. 3rd Street	Greenville	Steiger, Mrs. Howard P., 1927 Sharon Lane	Charlotte
*Smith, Mrs. Jay L., Jr., 225 N. Rowan Avenue	Spencer	Stenhouse, Mrs. Henry M., 109 S. George Street	Goldsboro
Smith, Mrs. John G., 200 Wildwood Avenue	Rocky Mount	Stephen, Mrs. C. Ronald, 1698 University Drive	Durham
Smith, Mrs. Joseph, 1303 E. 5th Street	Greenville	Stephens, Mrs. F. Irby, 54 Sunset Parkway	Asheville
Smith, Mrs. Joseph P., 935 Paramount Circle	Gastonia	Stephens, Mrs. Richard S.	Kannapolis
*Smith, Mrs. O. Norris, 107 W. Avondale	Greensboro	Stephenson, Mrs. Bennett E.	Rich Square
Smith, Mrs. Roy M., 220 E. Avondale	Greensboro	Sternbergh, Mrs. Waldemar C. A., 1217 Belgrave Pl.	Charlotte
Smith, Mrs. Sidney, 905 Williamson Drive	Raleigh	*Stevens, Mrs. Hamilton W., Jr., 90 Grovewood Road	Asheville
Smith, Mrs. Slade A., 308 N. Madison Street	Whiteville	Stevens, Mrs. Joseph B., 202 Homewood	Greensboro
*Smith, Mrs. William A., 2310 White Oak Road	Raleigh	Stevens, Mrs. Martin L., 155 Montford Avenue	Asheville
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(Continued from page 383)

COOK COUNTY GRADUATE SCHOOL OF MEDICINE

The Cook County Graduate School of Medicine has announced a one-week, intensive, practical course in the diagnosis and treatment of congenital malformations of the heart and of rheumatic heart disease in infants and children starting December 2. It is designed to be of interest to pediatricians, internists, and general practitioners dealing with these problems. The regular teaching faculty will be supplemented by distinguished guest lecturers.

The Cook County Graduate School of Medicine is located at 707 South Wood Street, Chicago 12, Illinois.

NEWS NOTES FROM THE AMERICAN MEDICAL ASSOCIATION

A.M.A. Plans Clinical Meeting

The birthplace of American independence—Philadelphia—will be the scene of the American Medical Association's Eleventh Clinical Meeting December 3-6. Center of activities will be Convention Hall, where scientific exhibits, color television, motion pictures, technical exhibits, and scientific lectures will be presented "under one roof." Headquarters for the House of Delegates will be the Bellevue-Stratford Hotel.

Highlights of the three-and-a-half day convention geared especially for the nation's family doctors include: (1) Special transatlantic conference between distinguished physicians in London and Philadelphia on "Advances in Chemotherapy in Cancer" via two-way telephone at 3 p.m. EST Wednesday; (2) Complete color television schedule of surgical demonstrations emanating from Lankenau Hospital; (3) Motion picture program daily plus a special session Tuesday evening; (4) Exhibits featuring a well-rounded program and special displays on the history of medicine in the Philadelphia area, fractures and manikin demonstrations on problems of delivery; (5) Panel discussions on cardiovascular disease, cancer, emotional problems of menopause, hypertension, diabetes, arthritis, traumatic injuries; (6) The General Practitioner of the Year Award to be presented by A.M.A. to an outstanding family doctor.

Doctors To Cooperate In "Farm-City Week"

The national committee for Farm-City Week, November 22-28, has extended a special invitation to all state and county medical societies to join in a program to "build better relationships between town and country neighbors." As in the past two years, this observance will be conducted nationally

and locally by hundreds of civic, industrial, agricultural, professional, and youth organizations—all spearheaded and coordinated by Kiwanis International.

The A.M.A., which is represented on the Farm-City board of directors, this month (October) will send to all societies a series of suggestions for highlighting their urban and rural health services during the Week. In most cases, local programs will be coordinated by community Kiwanis clubs. Names of both regional and state Farm-City Week chairmen also will be sent to medical societies so that physicians may be represented on the local planning committees.

WORLD HEALTH ORGANIZATION

The vital statistics and state of health of the world in 1954 are reflected in more than 580 pages of figures, collected in 109 tables. Through these conventional symbols—the figures—it is possible to give a picture of the population of each country, its growth and the illnesses from which it suffers, as well as of the extreme diversity of the conditions that exist—in short, to show what it is that the inhabitants of any part of the globe suffer and die from.

In addition to the usual section on population and vital statistics, causes of death and cases of communicable disease, this new edition of the WHO yearbook contains a new part dealing with health personnel, the number and distribution of hospitals, and the vaccinations of various types carried out in each country.

VETERANS ADMINISTRATION

Veterans Administration announced it will accept an increasing number of students for clinical training in occupational therapy, under the Physical Medicine and Rehabilitation Service, to help alleviate the national shortage in this field.

Occupational therapy training in VA hospitals offers clinical experience in a variety of disease and disability categories.

* * *

A new atomic medicine tool to measure and identify radioactive particles inside the human body has been developed by Veterans Administration.

VA physicians will use it in an effort to probe deeper into the secrets of sickness.

The instrument — a total body radioactivity counter — was designed and developed by Dr. Gerald J. Hine, a physicist in the radioisotope service of the VA hospital in Boston.

The instrument is so sensitive it can measure the tiny amounts of radioactivity that are naturally present in the human body.

NORTH CAROLINA

Medical Journal



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October, 1957

IN THIS ISSUE:

POPULATION CHANGES IN THE SOUTH AND MEDICAL PRACTICES
— TAYBACK

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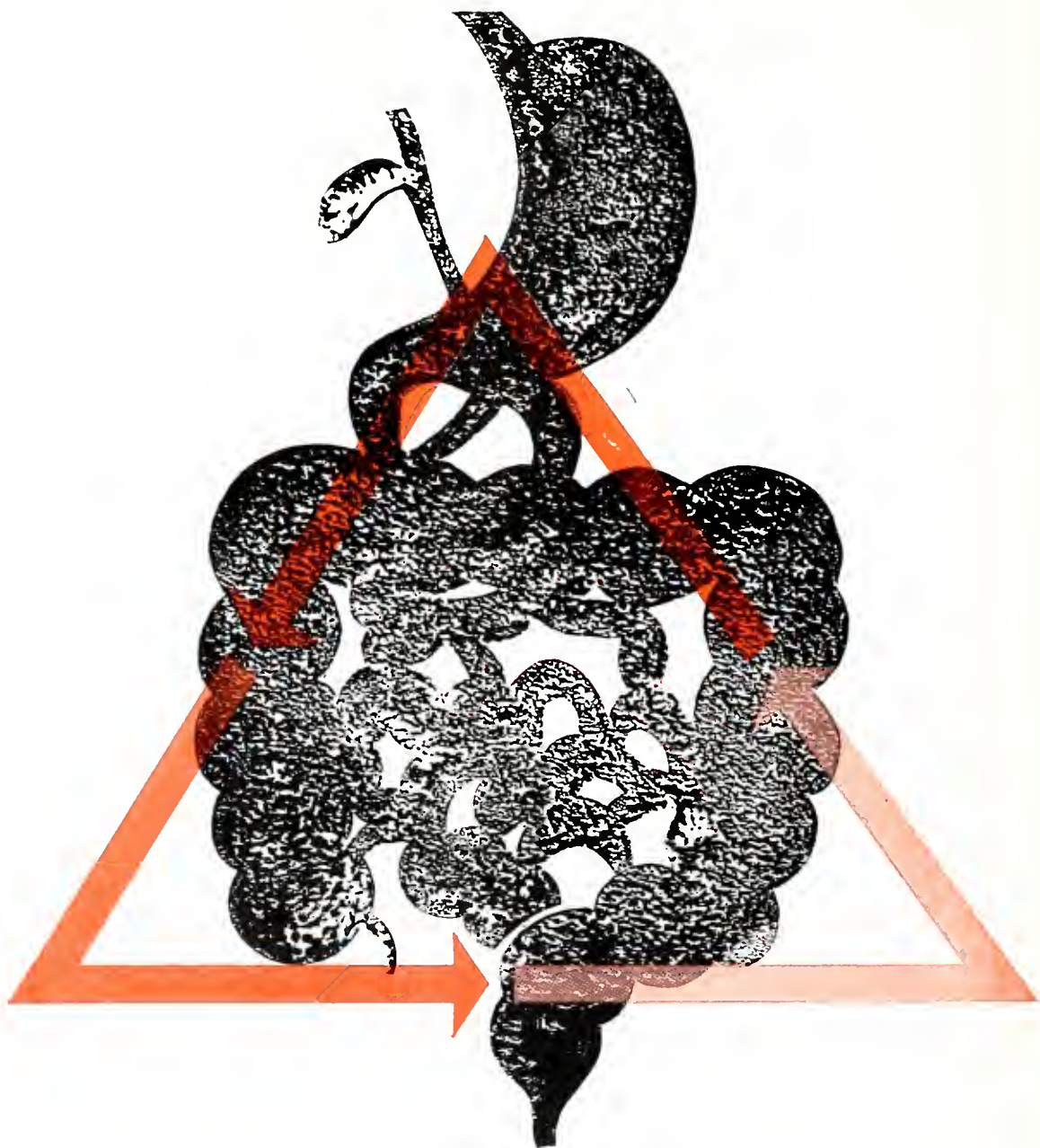
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Population Changes in the South And Medical Practices

MATTHEW TAYBACK, D.Sc.*

BALTIMORE, MARYLAND

This paper is concerned with the extent of urbanization of the population in the South, and particularly within the State of North Carolina; it compares the social and economic composition of urban communities with that of rural groups, with some reference to medical utilization practices; and it presents several implications of these matters for the medical profession.

Introduction

There is an interaction between the developments in preventive medicine, the advances in clinical therapy, and the social economic changes in the population which, in an insistent way, requires that the medical profession constantly evaluate the responsibilities appropriate for a public health agency, the suitability of a prevailing mode of practice, and the medical needs of the population. It is not necessary to belabor this generalization, but several examples, I would think, will point up the reasonableness of this statement.

An observer of the incidence of diphtheria and whooping cough is impressed by the near elimination of the first disease and the rapidly declining extent of the second. The prophylaxis afforded by diphtheria toxoid and by the pertussis vaccine has been so effective that the average North Carolinian doctor will not see a case of diphtheria in a year, nor will he make more than four visits in a year in connection with whooping cough⁽¹⁾. This fortunate develop-

ment, however, has not necessarily reduced the general practitioner's investment of time relative to these disease problems. Instead of devoting himself to care of the ill, he is engaged in the prevention of illness. Instead of visiting the home of a sick child, he receives the child in his office by scheduled appointment. In the course of these developments, the public health authority finds the procedures of quarantine and supervision of individual cases activities of diminishing significance.

During the early part of the decade, 1930-1939, the persistently high mortality associated with pneumonia made this disease a problem of major public health import. Measures were undertaken towards the creation of a control program, particularly during the time when type specific serum was regarded as efficacious. No sooner had strong efforts been made to organize a control staff, however, than the era of chemotherapy and antibiotics was ushered in, thus drastically altering the role of the public health agency and of the general hospital. The general practitioner could assume major responsibility for the uncomplicated case of pneumonia. The over-all impact was to enable the physician in general practice to treat a wider range of such cases, although drastically reducing the amount of time per case.

More recently, the successful use of chemotherapy in the treatment of tuberculosis has had farreaching effects upon the respective responsibilities of the general practitioner, the tuberculosis hospital, and the health authority. Unquestionably the result of this development will be to reduce the

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length of hospital stay and increase the abilities of the personal physician to treat this disease in his office. The health authority will experience an increase in its responsibilities relative to follow-up and control.

It is especially in respect to demographic trends that I would hope to demonstrate changes occurring in the South which may have very significant meaning for the practice of medicine.

Urbanization of the South

A favorable climate and a plentiful supply of labor have traditionally served as the source of strength for the agricultural economy characteristic of the South. These very factors are today serving to attract a substantial movement of industrial capital and plants to the Southern states. As a result, it has been estimated that in 1950 44 per cent of the population in the South was living in urban communities, and that urbanization was proceeding more rapidly here on a relative basis than in the remainder of the country⁽²⁾. How is this coming about?

High birth rates have always been typical of the South. When combined with moderate to low death rates, a substantial natural increase in the population results. For instance, in North Carolina, within the decade 1940-1949, an annual increase in population of 2 per cent could have been anticipated on the basis of the known facts relative to births and deaths⁽³⁾. Had all this population remained in the state, an increase of 775,000 individuals would have been realized in the 10-year period 1940-1950. Actually the increase was 490,000—that is, from 3,571,000 to 4,061,000. The difference—285,000—between the expected increase and that which was actually noted is an estimate of the net emigration from North Carolina in a 10-year period.

All but an insignificant fraction of the actual increase within the state took place in urbanized areas. According to recent population estimates made by the Bureau of Census, an additional population increase of approximately 400,000 has taken place here within the six-year period 1950-1956. There is every reason to believe that this new population increment will be found primarily in urbanized areas. In other words, the growth potential and concentration of the population is now inevitably connected with the

growth of cities and large population centers. Furthermore, it must be expected that the absolute number of individuals on farms will decline, and it is certain that the relative proportion of farm to total population will drop rapidly.

Although one might be led to express regret in this regard, the North Carolina Department of Conservation and Development, in a recent publication⁽⁴⁾, reported, "There is general agreement that a profitable agriculture in North Carolina, in most areas, requires the movement out of agriculture of many thousands of farmers and the consolidation of many farmers into large family units." The population will assuredly benefit economically and hopefully in a social and cultural sense as a result of the powerful demographic forces now at work in this state and throughout the South.

Urban Characteristics

Given these concepts of continued growth of the population, and a concentration and redistribution of population in urban areas, what are some of the characteristics of the urban dweller which are of some consequence for those of us interested in medical services? The more important are:

1. A favorable economic level
2. Extensive preoccupation of labor and management with medical economics
3. Concentration of the population from a spatial point of view
4. Comparative rigidity of the work situation for the laboring force
5. Isolation of the family unit.

In an analysis of the income earned by families according to place or residence, it was found as a result of the 1950 census⁽⁵⁾ that the urban family unit had a median income of \$3,431 per year, almost twice the median income of \$1,729 realized by a rural farm family.

Families living in rural non-farm areas were noted to have a median income of \$2,560. Within urban areas, a high proportion of the labor force is engaged in large industrial or commercial establishments. During the past 10 years a fantastic number of employee health and medical care plans have been negotiated on an industry-wide basis, and inevitably affect working forces wherever they may be disposed. Within the three year period 1953-1955, the

number of persons in North Carolina covered for hospital expenses increased from 1,625,000 to 2,320,000, or 43 per cent, while a similar increase was recorded in connection with surgical coverage⁽⁶⁾. In addition, the number of persons covered for regular medical expenses increased from 213,000 to 415,000, an increase of almost 100 per cent. In each of these categories the extension of coverage proceeded more rapidly in North Carolina than was experienced in the country as a whole, further evidence of the rapid industrialization here.

In this regard, it is appropriate to indicate that the utilization of medical services by urban populations is well in excess of that reported for rural groups. The data are especially significant in regard to services received by children under 15 years of age. In a study conducted by the American Academy of Pediatrics, physician visits per 1,000 children were highest in counties associated with metropolitan centers and systematically declined with distance from these centers.

Implications for Medicine and Public Health

Although it would be foolhardy to disregard the problems of medical care peculiar to rural areas, this paper is concerned with aspects of medical practice in urban areas which would appear to demand urgent attention if the profession would seek to follow a rational course as an alternative to being swept in an inevitable demographic development of vast proportions now in progress in the South.

The flow of the population toward urban areas will inevitably be followed by a movement of physicians to these areas. How should these doctors locate themselves so that they can best serve the community, providing a high quality of care to as many patients they can reasonably attend? The accessibility of urban families, the existence of few economic barriers, and a higher sensitivity to the need for preventive medical attention and early care are factors which minimize the necessity of establishing an immediate neighborhood relationship between physician and patient. Emphasis on preventive measures or early treatment increases the importance of scheduled office visits as contrasted with home visits and gives the physician more opportunity for diagnosis and general health

guidance. In this type of practice, there is good reason to consider the advisability of centrally located offices in working relationship with other physicians. Sharing secretarial help, equipment, and office suites are several of the possibilities which could enhance the physician's capabilities for service to an urban population and give him an opportunity for convenient daily contact with an associate.

The physician practicing in an urban center cannot separate himself from the economics of medicine. He may long for an individualized relationship with families under his care, but insurance programs of one type or another, and certifications to prove disability and other like duties will increasingly interject themselves. To a large extent, the lay person is lost in the verbiage which is used to describe the benefits of the various prepaid packages now on the market. Dissatisfaction and confusion on the part of the individual as to his benefits may result illogically in ill feeling toward the medical profession. In the urban community, there is a distressing vacuum of responsibility for guidance in respect to issues of medical economics. Such responsibility is not necessarily met by attention to Blue Cross or Blue Shield programs, but should include study and a program of public information on the strengths and limitations of various medical care insurance proposals.

It may prove difficult to bring the full measure of modern medical knowledge to a rapidly growing urban population through the use of the resources afforded by the general practitioner. It will then become necessary to consider how best a service can be rendered through community resources. In this regard it would appear that, for the near future at least, such activities as the promotion of mental health, particularly in school children, the nursing care of the chronically ill at home, case finding surveys in the control of cancer and tuberculosis, and investigation of the medical aspects of accidents are clear examples of medical services which properly lie within the area of responsibility of the public health authority.

Conclusion

Medicine, as a discipline concerned with human populations, not only affects the course of such groups, but must in its turn adapt itself to the varying forms which

human populations take. The heart-warming prototype of the country physician, an inspiring figure in the agricultural economy, requires remodeling to meet the needs of an urban, highly industrialized, and highly mobile population. The medical profession would do well to consider the economic, social, and spatial dimensions of urban society as it sets about to adapt itself to the changing order, which itself is the product of vast alteration in the hands of a vigorous medical profession.

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Psittacosis

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and

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RALEIGH

Psittacosis is an infectious virus disease endemic among several species of birds and transmissible to man, in whom it usually produces an atypical pneumonia.

It was described in 1876 and again in 1880, when the association between the disease in man and the presence of ill birds was first noted. It was rarely recognized as a clinical entity until 1929-1930, when epidemics in the United States and Europe were studied. At this time it was discovered that the etiologic agent was filterable and could be demonstrated as intracellular "elementary" bodies in the infected tissues of parrots and human beings. In 1931 the U. S. Public Health Service placed drastic restrictions on the importation and interstate shipment of psittacine birds—parrots, parakeets, and the like.

Research over the next decade established conclusively that the infective agent was a large virus. It was shown that a number

of animals could be experimentally infected and that pigeons and other domestic fowl, as well as psittacine birds, could infect man. In the 1940's the infection was found to be present in the domestic and natural bird populations. After World War II there was an ever increasing demand for small talking birds such as parakeets. The demand, illegal importation, and the discovery of natural reservoirs in the avian population, as well as the demonstrated effectiveness of certain antibiotics, led the U. S. Public Health Service in 1951 to repeal the restrictions on the importation and sale of psittacine birds. Vast numbers of these birds were brought into the country, both legally and illegally, many of which, especially those smuggled in, were harboring the virus. Thus on a large scale a highly infective segment of the natural avian reservoir was placed in intimate contact with human beings.

Figure 1 shows the tremendous rise in the number of reported cases of the disease in the United States and North Carolina since the removal of restrictions. The cases accounting for this increase are well distributed geographically, and do not reflect intensive investigation on a national scale.

Read before the Section on Public Health and Education, Medical Society of the State of North Carolina, Asheville, May 7, 1957.

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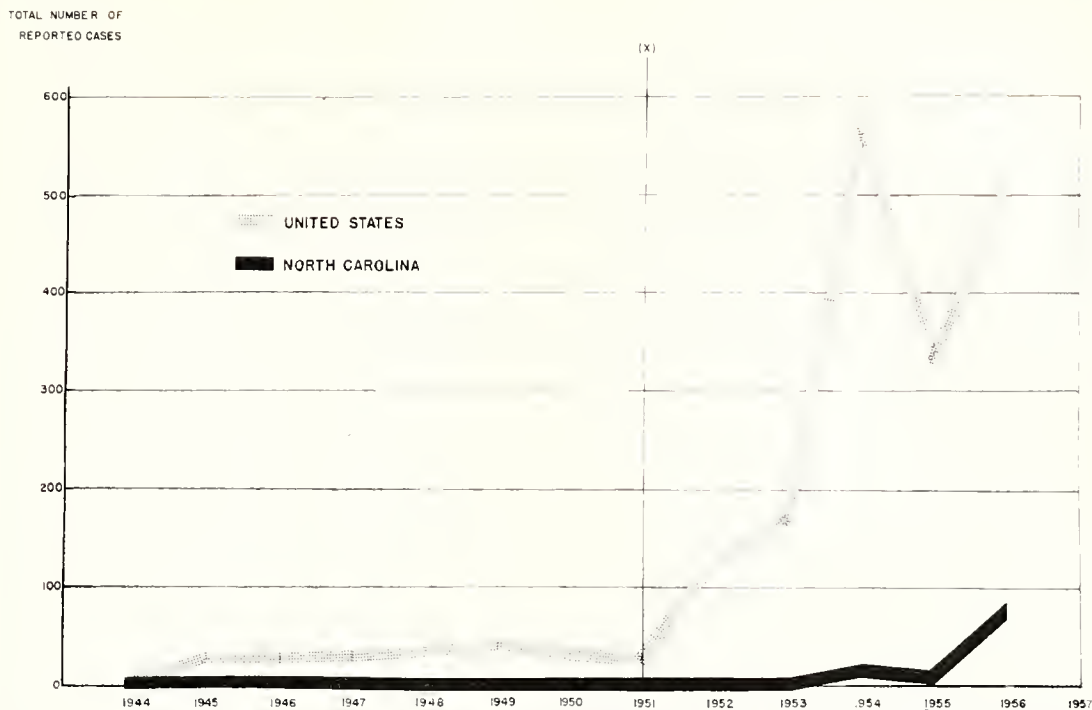


Fig. 1. Rise in reported cases of psittacosis, United States and North Carolina: 1944-1956. (The line (x) represents the removal of restrictions on importation of psittacine birds by the U. S. Public Health Service on November 15, 1951.)

SOURCE NORTH CAROLINA—N. C. STATE BD. OF HEALTH, DIV. OF EPID.
UNITED STATES—NATIONAL OFFICE OF VITAL STATISTICS, PHS, DHEW

Signs and Symptoms

Generally the incubation period ranges from 7 to 15 days, and the onset may be either abrupt or gradual. The initial symptoms are malaise, headache, and fever. Cough is usually nonproductive, and chills may occur. Pleuritic pain may be present, and the pulse slow in relation to the temperature. Pulmonary consolidation develops in the majority of patients, usually spreading outward from the hilum in a patchy, irregular distribution. The pneumonic process is of the interstitial type and is difficult to locate on physical examination, but is readily revealed by x-ray. Diarrhea, epistaxis, skin rashes, and phlebitis occasionally occur, but usually do not complicate the clinical picture. A normal respiratory rate and a normal leukocyte count are the general rule. Hemoptysis may occur in some cases. Symptoms usually subside in two to three weeks, but many patients remain ill for a much longer period. Relapses are common.

Diagnosis

A history of association with birds in a patient presenting the symptoms and signs of an atypical pneumonia should immedi-

ately suggest the diagnosis. In some cases, however, no definite history of avian exposure can be found. Cases vary widely in symptomatology and severity, and inapparent infection is common. Mild cases may be confused with pulmonary tuberculosis, histoplasmosis, Q-fever, brucellosis, or influenza. The more severe one may at times resemble typhoid fever. Without the assistance of laboratory tests, the disease rarely can be distinguished from atypical pneumonias of other etiology.

The following cases illustrate a typical chain of infection⁽¹⁾.

Illustrative Cases

Case 1

The patient, a 20 year old Negro man became ill around September 15, 1955, with chest pain and a productive cough. About July 1, 1955, he had acquired a blue parakeet which died early in September. A 4 by 5 chest roentgenogram made in the Mecklenburg County Health Department four days after the onset of symptoms showed an irregular density in the left mid-lung field. He was feeling better when examined in the Mecklenburg Sanatorium nine days after onset. A roentgenogram made at this time was essentially unchanged. A blood specimen taken on the seventeenth day

showed a titer of 1:123 for psittacosis. The same density was present in the third film taken on October 4. After his second visit he continued to complain of malaise, cough, and low grade fever, and was admitted for further studies which were negative. A film taken on October 11 showed resolution of the lesion.

Case 2

This patient was the 15 year old brother of the patient in case 1, and lived in the same house. The illness began with a cough about September 19, 1955. He was afebrile on October 10, when a chest roentgenogram showed a density comparable to that of his brother but located in the right mid-lung field. The chest film made on October 17 was essentially unchanged. Complement fixation tests for psittacosis on October 18 revealed a titer of 1:256. The patient was never clinically ill, and studies for tuberculosis were negative. A chest film taken on October 31 showed gradual clearing of the pulmonary density. On November 4 his complement fixation titer had dropped to 1:32.

Note: A third brother, aged 13, was never clinically ill but demonstrated a complement fixation titer of 1:128 on October 31, 1955, which remained at this level through November 21. His roentgenographic studies were essentially negative.

Case 3

This patient, a 20 year old man, acquired the mate to the blue parakeet owned by his brother at about the same time. The bird showed no signs of illness but flew away early in September. A chest roentgenogram of the patient taken September 19, 1955, showed a heavy density in the left mid-lung field. He was seen in the outpatient clinic at Mecklenburg Sanatorium on September 21, 1955, at which time a provisional diagnosis of virus pneumonia was made. The lesion cleared rapidly between September 21 and October 4. The complement fixation titer for psittacosis was 1:128. A tuberculin skin test was negative, and he was treated with Achromycin (tetracycline), 1 Gm. daily, for 10 days at home. On November 21, 1955, his roentgenogram was clear, except for a linear scar in the left lung field. At this time his complement fixation titer was still 1:128.

Comment

It is interesting to note that the two parakeets in question had been owned by and in contact with another family for three and five months respectively before the two brothers acquired them. No illness obtained in the family that originally purchased the birds. The birds themselves gave no indication of being sick while in captivity at the dealers or at their first home. This illustrates the fact that parakeets may appear healthy and still be highly infective for

persons in contact with them. Very short periods of contact may prove infectious.

The etiologic agent is a member of the psittacosis lymphogranuloma venereum group of viruses, varying between 250 to 350 millimicrons in diameter, and when properly stained can be seen with an optical microscope. During the first 24 hours the virus particle enters the cell and forms a matrix. During the second day it multiplies, rapidly filling the cytoplasm, and by the third day it causes necrosis and rupture of the cell, with the release of myriads of infective virus particles which repeat the cycle. This is demonstrable in both avian and human infection as well as in tissue culture⁽²⁾.

The pathologic process in birds is usually seen in the liver and spleen, which are enlarged and show focal necrotic lesions in which elementary bodies can be demonstrated. Pneumonia seldom occurs in the naturally infected birds. The reservoir is perpetuated by passage of the virus from one bird generation to the next and by cross infection in aviaries. At distribution points where large numbers of parakeets are brought together to await shipment, conditions are ideal for cross infection. Live virus is excreted in the nasal discharges and droppings, and readily contaminates the feathers and cages. The most common mode of transmission is probably by droplet infection or airborne desiccated bird droppings. The virus withstands prolonged drying, and in this state is highly infective for both bird and man.

In the majority of cases in human beings, infected birds represent the source. While no human cases in North Carolina have been traced to non-psittacine birds, several other states, notably Oregon and Texas, have experienced serious outbreaks among employees of turkey processing and rendering plants⁽⁷⁾. One of our group (M.P.H.) has demonstrated high antibody titers in a survey among employees of chicken and turkey processing plants in North Carolina.

Susceptibility is not confined to any sex or age group, although children are thought to be somewhat more resistant. The virus enters the body via the respiratory tract. In man the pathologic lesions are seen chiefly in the lungs as irregularly distributed pneumonic patches. These areas show

Table 1

Positive Findings in Seventy-nine Cases of Psittacosis

Fever	Cough	Headache	Chest Pain	Malaise	Chills	X-ray Abnormal	Lung Findings	Exposure
50	56	47	37	60	19	31	52	56
Sex				Race				
F		M		N		W		
54		25		8		71		

mononuclear infiltration of the alveolar walls and spaces, often with fibrin deposition and cuffing of the terminal bronchioles. There is a remarkable swelling of the epithelium lining the alveoli and a proliferation of the cells. At necropsy elementary bodies can also be demonstrated in the liver.

The virus is present in the patient's sputum, blood, throat washings, and vomitus. Transmission from person to person may occur but is not considered common. During the acute phase virus can be isolated by inoculation of blood or sputum into mice⁽²⁾.

Proof of clinical illness should depend on: (1) isolation of the virus from the patient; or (2) a fourfold or greater increase in antibody titer.

Diagnosis

The complement fixation test is by far the most rapid and practical diagnostic method for the practicing clinician. Complement fixing antibodies may appear in the serum of untreated patients from four to eight days after the onset of symptoms. A titer may not develop, however, until 10 to 35 days after onset. Under chemotherapy the appearance of these antibodies may be delayed for 20 to 40 days. The first blood specimen should be drawn as early as possible after onset, and the second should be obtained two to four weeks after the first in order to observe the rise in titer, which is diagnostic. An initial titer of 1:16 or greater when obtained from a patient with clinical manifestations of psittacosis may be considered positive⁽²⁾. In appropriately selected patients seen during the convalescent phase a falling titer, if accompanied by a good history and compatible symptoms, is highly suspect.

The psittacosis and lymphogranuloma viruses possess a common antigen, and will cross-react. The lymphogranuloma venereum reactions tend to fade during convalescence, while the psittacosis titers rise and may

remain elevated for many months. Differentiation on a clinical basis is usually not difficult. False positives have been observed in Q-fever and brucellosis. As a rule cold agglutinins are not demonstrable in the blood of psittacosis patients. The psittacosis virus is persistent and occasionally produces a carrier stage after recovery in which case titers may remain stable for years⁽²⁾. Long persistence of antibodies despite adequate chemotherapy has been observed. It should be noted that low titers are prevalent among bird owners and persons in constant close association with birds.

North Carolina Data on Psitticosis

During the past year the Division of Epidemiology, with the aid of local health departments and private physicians, has been collecting data on psittacosis. In 1956 North Carolina reported the greatest number of cases in the United States. This does not represent an abnormal quantum of infection, but is the result of investigation of the problem. Recent publications indicate that a similar situation exists in other states.

In table 1 are summarized the positive findings in those cases which have been officially reported by practicing physicians in the state. There are 79 cases in this group; however, epidemiologic reports were not received on 15 cases. We consider the diagnosis to be definitely established in 64 cases.

All these patients were treated by their physicians with varying amounts of cycline derivatives and/or penicillin during the acute and convalescent phases of the disease.

In table 2 are summarized the positive findings in 15 cases which, while suspect, could not be accepted as proved, owing to the lack of an official report by the physician, to insufficient symptoms, to an inadequate history, or to a lack of sufficient antibody titer or change in titer.

Table 2

Positive Findings in Fifteen Unconfirmed Cases of Psittacosis

Fever	Cough	Headache	Chest Pain	Malaise	Chills	X-ray Abnormal Lung Findings	Exposure
11	11	11	9	14	5	7	10
Sex				Race			
F		M		N		W	
8		6		2		13	

Complement fixation tests were requested by physicians for 18 patients on whom no history or report could be obtained. Titers ranged from 1:16 to 1:64. In addition there were 26 single or multiple titers of 1:8 which we feel represent subclinical infection in the population at large.

Isolation of the virus from the bird or birds with which the patient has had contact is a useful means of corroborating the diagnosis, and was accomplished on many of the cases cited in this study.

Penicillin and the cycline derivatives have been found to be effective both *in vitro* and clinically against psittacosis. Penicillin prevents intracellular division of the virus particle, but apparently does not alter its ability to enter host cells⁽¹⁾. With chlorotetracycline (Aureomycin), however, both division and invasiveness of the virus particles are suppressed⁽¹⁾. Clinical trials in birds and humans indicate that the cycline derivative is the superior drug⁽²⁾. In spite of treatment intracellular organisms may persist, and carrier states have been demonstrated⁽²⁾.

The North Carolina State Laboratory of Hygiene is equipped to carry out virus isolation studies on any bird suspected of being the source of human infection. This is a time-consuming procedure, and is accomplished by injecting bird spleen homogenate into mice, in which the elementary bodies can be demonstrated. The method entails sacrifice of the bird. Instructions for submitting the birds may be obtained from the local or state health department.

Studies carried out by the North Carolina State Board of Health and several other states have shown promising results in freeing infected birds of the virus. The method of treatment consists of intramuscular injections of cycline derivatives. Instructions for this procedure may be obtained from the Veterinary Public Health Section of the State Board of Health.

An antibiotic-coated bird seed is under development, but the results of treatment with this material are still in the experimental stage.

In order to control this disease the North Carolina State Board of Health permits the owner of an aviary that is known to be infected the option of supervised treatment or destruction.

Since the writing of this paper, psittacosis has been made a compensable disease for certain occupations by the 1957 General Assembly of North Carolina.

Summary

1. Psittacosis is a disease of increasing incidence and public health importance.
2. The symptomatology and diagnosis are reviewed.
3. The diagnosis may be confused with other diseases and can only be confirmed by laboratory means.
4. The source of human infection in North Carolina is thus far almost solely from contact with parakeets in the home, aviaries or pet shops.
5. Although no cases have been reported, the possibility of human infection from non-psittacine birds (*i.e.*, turkey processing) cannot be overlooked.
6. Data are presented on 64 proved cases and 15 suspect cases of psittacosis in North Carolina.
7. Psittacosis should be suspected in every patient who presents signs of atypical pneumonia and a history of association with birds.

Acknowledgements

1. All serologic tests shown were performed by the serology section of the North Carolina State Laboratory of Hygiene.
2. Acknowledgement is made to the many physicians and health officers who assisted in the collection of the data presented. Special acknowledgement is made to Dr. G. V.

Mills, former Health Officer of Bladen County, Dr. Walter Humbert, Pitt County Health Officer, Dr. W. A. Browne, Edgecombe County Health Officer, Dr. J. H. Epperson, Durham County Health Officer, and Dr. Z. P. Mitchell, Cleveland County Health Officer.

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Oral Therapy of Diabetes Mellitus: Tolbutamide

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WINSTON-SALEM

An oral drug for the treatment of diabetes must obviously be effective and relatively nontoxic. The only orally effective compounds known presently are aryl sulfonylureas and imido-ureas. Insulin itself, a protein, is digested when taken by mouth, and oral insulin treatment is erratic and ineffectual. Attempts at enteric coating have not overcome this inherent difficulty. Such agents as Entozyme (A. H. Robins) have no measurable effect on blood sugar, as shown in figure 1. The benefit of a high protein diet (with or without Entozyme) in the dietary management of diabetes was beautifully shown by the classic experiment of Allen in 1914⁽¹⁾.

The imido-urea compounds are still experimental, and initial study suggests high toxicity. Early sulfonylureas, such as IPTD and carbutamide (fig. 2), proved toxic. Carbutamide (Lilly) reached broad clinical trial, but was withdrawn in this country when 10 per cent toxicity appeared. Deaths were due to acute hepatic necrosis and to agranulocytosis. Toxicity of this drug is related to the amino group in para position on the benzene ring. It will be recalled that certain of the older sulfonamides with this particular configuration proved highly toxic. The drug of choice for oral therapy

of diabetes is tolbutamide (Orinase — Upjohn), which in about 5,600 patients has shown 3 per cent toxicity, with no deaths clearly attributable to it.

Tolbutamide is a sulfonamide and is therefore, inherently capable of producing any known type of sulfonamide toxicity. Renal tubular precipitation of crystals is not encountered, owing to the high solubility of the drug⁽²⁾ and the low dosage clinically employed. Toxicity is manifested in anorexia, nausea, vomiting, diarrhea, abdominal discomfort, skin rashes with itching, transient leukopenia, temporary suppression of thyroidal uptake of iodine

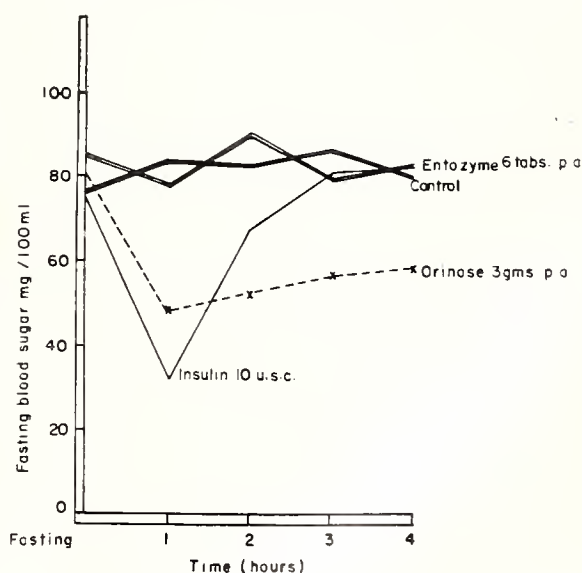


Fig. 1

Read before the Section on Internal Medicine, Medical Society of North Carolina, Asheville, May 8, 1957.

From the Department of Medicine, Bowman Gray School of Medicine, of Wake Forest College, Winston-Salem.

The Orinase in this study was supplied by Dr. C. J. O'Donovan of the Upjohn Company, Kalamazoo, Michigan.

ARYL SULFONYLUREAS

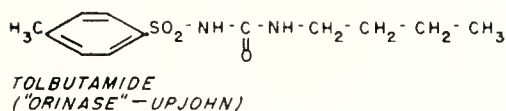
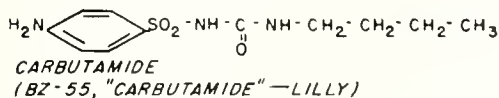
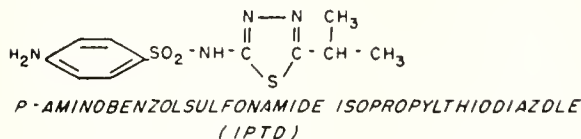


Fig. 2

131 by high doses, and an occasional increase in the severity of symptoms in patients with peptic ulcer.

The sulfonylureas are excreted chiefly in the urine as a metabolically inert derivative⁽³⁾. Free and bound blood levels and urinary excretion rates parallel those of other sulfonamides. Despite rapid excretion, the hypoglycemic effect of tolbutamide may persist for hours or days after administration is stopped. Carbutamide possessed minor antibacterial potency; tolbutamide in ordinary dosage does not. Four grams per day of tolbutamide will, in some patients, suppress iodine 131 uptake into the hypothyroid range; spontaneous restoration to euthyroid levels occurs even though this dose is continued⁽⁴⁾. Maintenance doses have no significant effect on thyroid function.

Mechanism of Action

Certain observations may be made concerning the mechanism of action of sulfonylureas, which remains the subject of extensive investigation. Some islet beta-cell function is essential; exogenous insulin is insufficient to permit drug effect in the totally pancreatectomized patient. The action is not like that of insulin, and increased peripheral glucose utilization cannot be demonstrated by any of the standard experimental techniques that demon-

strate this effect of insulin itself. There is indirect and direct evidence that gluconeogenesis or hepatic release of glucose is inhibited by tolbutamide. The notion that the acute effect on blood sugar is the result of stimulation of the secretion of endogenous insulin by the patient's remaining beta cell, and that the chronic effect is due to interference with the hepatic mechanisms of glucose production and release is the most satisfactory explanation of the conflicting experimental data.

Selection of Patients

Figure 3 documents the importance of age in patient responsiveness to tolbutamide. The 20 per cent mean fall in blood sugar is a modest response; if one adopts a more rigorous criterion of a 50 per cent mean fall in blood sugar, the drug is quite rarely effective in patients under 40. Such clinical observations support experimental evidence that some beta-cell function is a prerequisite for adequate response. The drug works best in patients with a late onset of diabetes, little tendency to spontane-

PERCENTAGE OF PATIENTS RESPONDING TO TOLBUTAMIDE WITH 20% MEAN FALL IN BLOOD SUGAR

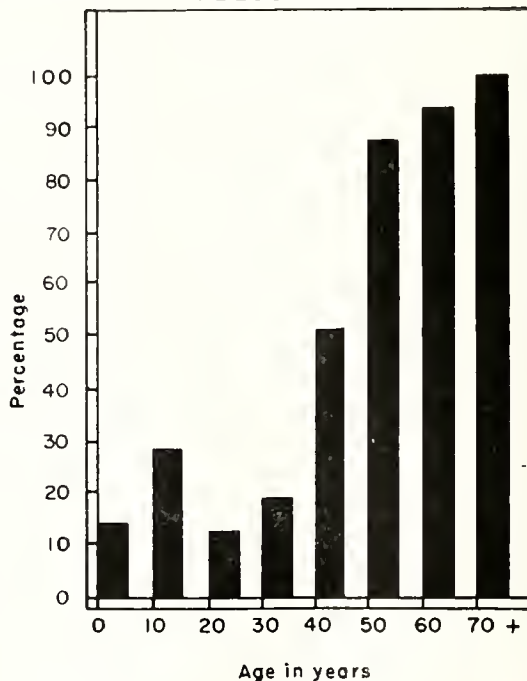


Fig. 3

ous ketosis, stability of blood sugar levels and a low to moderate insulin requirement, and works poorly, if at all, in juvenile diabetes. Juvenile diabetic patients have less than 10 per cent of the normal pancreatic extractable insulin and imperceptible blood levels; adult diabetic patients have usually more than 30 per cent of normal pancreatic extractable insulin and low but measurable plasma insulin levels⁽⁵⁾.

Age is not the only factor influencing response; the criteria for tolbutamide therapy are as follows:

1. Age more than 40 years.
2. Insulin requirement low or moderate (rarely more than 50 units per day).
3. Diabetes uncontrolled by weight reduction and diet.
4. Absence of spontaneous ketosis or acetonuria when insulin is withdrawn.

Method

Approximately 70 per cent of patients satisfying the above clinical criteria are adequately controlled by tolbutamide therapy. Single test doses are of no value in predicting eventual response. A four-day therapeutic trial is justified in patients selected on the basis of the above criteria; no patients who have eventually been controlled by oral therapy have failed to show at least some response in four days. Two weeks is an adequate trial period. Patients should be returned to insulin at once if ketosis appears, after four days if no effect on blood sugar levels and glucosuria is seen, and after two weeks if entirely satisfactory diabetic control is not achieved. Control means that the urine is consistently free of glucose and that fasting blood sugar values are within the normal range of less than 120 mg. per 100 ml. (true blood sugar). Postprandial blood sugars ordinarily will be under 160 mg. per 100 ml. (true blood sugar) after the first hour if the fasting values are within the normal range. An occasional postprandial blood sugar up to 180 mg. per 100 ml. may be tolerated.

Hospitalization is not necessary if the patient is intelligent and reliable and telephone or office contact can be maintained during the first few days after tolbutamide is started. Urine tests four times daily for acetone are essential, and the appearance of acetonuria requires the immediate resumption of insulin therapy. Rapid reduc-

tion of daily insulin dose as oral therapy is begun is essential in the first few days of treatment in patients with a high requirement of insulin, say more than 40 units. Insulin may be replaced in one step by tolbutamide in patients with a low or moderate insulin requirement.

Initial daily dosage is 4 Gm. in two doses; this is reduced in 4 or 5 days to 2 Gm. if adequate control is achieved. After about a week on 2 Gm. a day, most patients can be placed on a maintenance dose of 1 tablet twice daily (1 Gm.). The maintenance dose varies from 0.5-2.0 Gm. Patients requiring more than 2 Gm. of tolbutamide per day as a maintenance dose should be returned to insulin, as long-term control is rarely achieved; they soon "break-through" the drug effect with recurrent hyperglycemia and glucosuria. The important toxic effect is hypersensitivity in type and unrelated to dose, but some thyroid suppression may occur with prolonged high-dose treatment. Above a dose of approximately 2 Gm. per day, relatively small increments in hypoglycemic effect are obtained per unit increase in dosage.

The program outlined above has provided satisfactory results in our clinic, but it should be pointed out that there is no convincing evidence that initial doses of 2 or 3 Gm. may not yield equally good results. Although two doses daily is generally fashionable, there is no convincing evidence that this technique has any advantage over a single daily dose.

Contraindications

Surgery, pregnancy, infection, and similar stressful situations predisposing to ketosis are contraindications to oral therapy. Diabetics on tolbutamide who require surgery should be returned to insulin until diet and insulin requirements have stabilized postoperatively. Maintenance doses of tolbutamide may then be substituted for insulin injection. Stress-induced ketosis is not necessarily a contraindication to later oral therapy; spontaneous ketosis on ordinary diet and activity is. The contraindications are:

1. Known sulfonamide hypersensitivity
2. Inability to follow patient closely
3. Liver disease (since the drug may act by interfering with hepatic enzyme systems); however, routine hepatic function tests and transaminase (S-GOT) determinations in patients on

chronic tolbutamide therapy are normal.

4. Age less than 40 years
5. Stress—for example, pregnancy, infection, surgery
6. Insulin requirement of more than 50 units per day. Exception: in the occasional thin adult with true insulin resistance requiring more than 100 units per day, tolbutamide reduces the insulin requirement to that expected in the average patient of the same age. This effect on insulin requirement is not seen in the juvenile diabetic taking large amounts of insulin or the overweight adult who takes an excessive amount of insulin in order to overeat consistently without glucosuria.
7. Hypothyroidism
8. Presence of late degenerative complications of diabetes mellitus or onset of diabetes under the age of 30.

Absence of Hypoglycemic Symptoms

Besides the obvious advantage of oral treatment, there is a second advantage of these drugs of great importance and attractiveness to the diabetic patient. Hypoglycemic reaction with unconsciousness and convulsions does not occur with tolbutamide alone. Some symptoms of hypoglycemia are occasionally encountered. These are of the type commonly seen with protamine zinc insulin (PZI) and include early morning headache, mental dullness, irritability, anorexia, nausea, and occasional vomiting. The symptoms are promptly relieved by eating or by the intravenous administration of glucose. Severe hypoglycemic reactions may occur in the diabetic on tolbutamide who receives additional insulin, even in modest amounts. It may be anticipated on the basis of experimental work that severe hypoglycemia will ensue in patients with relative or absolute adrenal insufficiency who are given Orinase.

Disadvantages

The disadvantages of oral treatment of diabetes are in part psychologic. The dissemination of the fact that there is an effective pill for some diabetic patients may encourage the unwise and potentially dangerous use of pills that are ineffective or toxic, or the use of pills that are effective in some patients for those in whom they are not.

Dietary indiscretion, if not actually encouraged by oral treatment, is at least made easier. Weight gain in the already obese or borderline obese patient is a frequent clinical side effect of oral treatment. Refractoriness to tolbutamide is not uncommon in this group of patients showing excessive weight gain. The physician is himself tempted to compromise with sound diabetic management, since it is easier to prescribe a tablet than to educate the patient concerning diet. Patients in whom diabetes may be satisfactorily controlled by diet alone should be so treated. Tolbutamide is not a substitute for diet in the treatment of diabetes, although it may sometimes be substituted for insulin. Finally, it must be remembered that tolbutamide is not replacement therapy. Its effect is not like that of insulin. Its action may not be physiologic, and it may not do what insulin does to postpone the appearance and minimize the severity of the late degenerative complications of diabetes. The long-term toxicity of tolbutamide cannot be known, since the total clinical experience with this drug encompasses about two years.

Orinase has been discontinued in 4 patients seen in our clinic. In 3, the drug was discontinued after therapeutic trial because of inadequate control. In the other, it was stopped because of a severe itching skin rash. Transient leukopenia developed in one patient and a skin rash in another, but in neither of these patients was it necessary to discontinue tolbutamide. Adequate diabetic control has been obtained with tolbutamide and diet in more than 50 patients, some of whom have been followed for as long as six months.

Conclusion

A nontoxic, oral drug that will adequately control the total diabetic metabolic disorder in all diabetic patients is not now and may never be known. The sulfonylureas are only an exploratory, tentative step toward such an agent. If used wisely in carefully selected patients, the sulfonylureas make possible successful oral treatment of diabetes mellitus. This encouraging development merits continuing intensive clinical and experimental study.

Acknowledgement

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Some Aspects of the Evaluation and Management Of Convulsive Disorders in Childhood

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CHAPEL HILL

One of the most common disorders encountered in the pediatric clinic is that of recurrent convulsions. About one half of 1 per cent of the population⁽¹⁾, or some 800,000 persons in the United States alone, are afflicted with this condition. Many famous men have suffered from it: Julius Caesar, Alexander the Great, Dostoevski, Lord Byron, Berlioz, Swinburne. Yet, despite its frequency and the recent rapid increase in the medical knowledge of epilepsy, the thinking of many individuals concerning it has advanced only a little beyond that of the Middle Ages, when it was felt that an epileptic must in some way be possessed of the Devil.

It is important to recall that the word "epilepsy" actually refers to a symptom of a wide variety of disorders of the central nervous system. Because many think primarily of "idiopathic epilepsy" when the term is mentioned, it often seems more appropriate to speak of "convulsive disorders." For, as the name implies, idiopathic epilepsy refers only to that group of the convulsive disorders for which there is still no evident etiology.

Etiology

Table 1 summarizes our present concepts concerning the etiologic factors in recurrent convulsions. A review of such a list emphasizes the need for a detailed evaluation of each patient with seizures before one considers the institution of anticonvulsant therapy.

Brain defects and injuries

The age of the patient is helpful in evaluating the possible causes of his convulsive

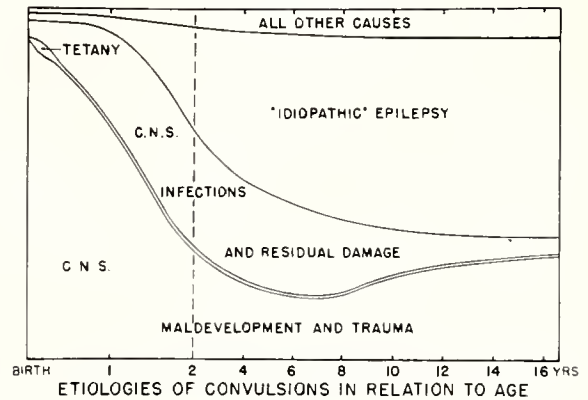


Fig. 1

disorder. This is illustrated in figure 1. During the first year of life recurrent convulsions unassociated with fever are most apt to be the result of some form of cerebral maldevelopment or of brain injury at birth. After 2 years of age such a disorder is more likely to be classified as idiopathic or cryptogenic epilepsy. As our ability increases to combat central nervous system infections and some of their complications, such as the subdural effusions which frequently complicate meningitis, the area reserved for "C.N.S. infections and residual damage" on such a chart steadily decreases.

As our knowledge grows it also seems certain that the terms "idiopathic" or "cryptogenic" will be applied to a diminishing proportion of convulsive disorders. The work of Penfield and his associates has been most stimulating in this regard. It has long been known that a remarkable number of electroencephalograms from individuals with epilepsy tend to show unilateral or bilateral temporal lobe foci. Often, although not necessarily, characteristic symptoms are associated with the elec-

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Table 1
Etiologic Factors in Recurrent Convulsions

- | | |
|---|--|
| <p>A. Febrile convulsions</p> <p>B. Idiopathic epilepsy
(cryptogenic; no apparent cerebral lesion)</p> <p>C. Acquired brain damage</p> <ol style="list-style-type: none"> 1. Birth trauma 2. Anoxia 3. CNS infections <ol style="list-style-type: none"> (a) Prenatal (as toxoplasmosis) (b) Postnatal (as meningitis, encephalitis, and brain abscess) 4. Toxins (lead, etc.) 5. Postnatal cerebral trauma 6. Postnatal vascular accidents 7. Renal disease 8. Parasitic infestations 9. Neoplasms | <p>D. Cerebral maldevelopment (including congenital defects of cerebral blood vessels)</p> <p>E. Degenerative brain disease</p> <p>F. Metabolic abnormalities:</p> <ol style="list-style-type: none"> 1. Hypocalcemia 2. Functional hypoglycemia 3. Enzymatic defects (probably mainly hereditary, as Von Gierke's disease, phenylketonuria, etc.) <p>G. Disorders simulating epilepsy</p> <ol style="list-style-type: none"> 1. Simple syncopal attacks 2. Narcolepsy and cataplexy 3. Breath-holding spells 4. Hysteria |
|---|--|

troencephalographic changes referable to this area: olfactory aura, abdominal aura, *deja vu* phenomena, psychomotor episodes, or nocturnal seizures. Penfield's group⁽²⁾ reports that 100 of 157 such patients (63 per cent) who underwent exploratory operations showed evidence suggesting that anoxemia had occurred early (presumably at birth) in the medial and inferior portions of the temporal lobe. They point out that such changes could easily occur as a result of a temporary compromise of the blood supply from the anterior choroidal artery, which is as large as the middle cerebral artery at the time of birth. They suggest that this compromise is due to a temporary herniation of the temporal lobe through the incisura of the tentorium during the birth process. They further showed that compression of the heads of stillborn babies does produce such herniation and that the latter can be demonstrated if the head is immediately frozen to prevent the evidence of herniation from disappearing.

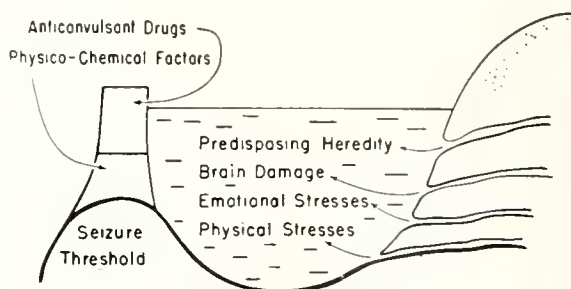
Heredity

Yet, despite the likelihood that many patients with so-called idiopathic epilepsy actually have some unrecognized brain damage, it seems quite certain that heredity must also play a part. Lennox has been a strong exponent of this view for many years. Probably his most convincing statistical evidence is derived from a study of 122 pairs of twins. Among these pairs, eliminating those who showed definite evidence of brain damage before the onset of seizures, both twins were epileptic in 84

per cent of the monozygotic pairs, but in only 10 per cent of the dizygotic pairs⁽³⁾.

Stress

In addition to the predisposition resulting from cerebral maldevelopment or damage or from heredity, there are other factors which may contribute to the occurrence of seizures. Primary among these are various emotional and physical stresses. The familiar analogy of a reservoir, illustrated in figure 2, is a most useful concept. Here the potential for a convulsion is represented by the water, fed by various springs representing predisposing heredity, brain damage, and emotional and physical stresses. Escape of water over the top of the dam would represent a seizure. The dam itself represents restraining factors, including certain physicochemical characteristics of the patient, such as his degree of acidosis, degree of dehydration, and blood sugar level, plus the effect of the anticonvulsant drugs which he is receiving.



THE SEIZURE RESERVOIR
(After Lennox)

Fig. 2

A well recognized example of physical stress is menstruation; occasional adolescent girls may break through their anti-convulsant regimen only at this time. Other stresses in this category include physical illness, especially when associated with fever. The febrile convulsions which occur with rapid rises of body temperature in some 3 per cent of infants or young children⁽⁴⁾ apparently result primarily from this form of physical stress alone in most instances, for only 5 to 10 per cent of them will go on to have afebrile convulsions later.

One frequently sees patients whose convulsions are precipitated primarily by emotional factors. Occasionally the relationship is so striking as to render difficult differentiation from some form of hysterical episode or anxiety attack. We have the definite impression that some patients are more prone to seizures on special holidays, such as Christmas. Many parents, noting an increased incidence of seizures with fatigue or emotional excitement, ask whether they should limit their child's activity. Under such circumstances we believe that the answer lies in building the dam somewhat higher. The dose of anticonvulsant drug should be increased and the parents urged to regard their child as a normal youngster.

Frequently "emotional" and "organic" factors are so intertwined that they are very difficult to differentiate. Recently we have seen two excellent examples of this among children in early adolescence, one a boy and the other a girl. The boy had a fairly definite history of convulsive disorder consisting of occasional psychomotor episodes associated with bilateral temporal lobe foci electroencephalogram. The girl had had no clinical suggestion of seizures, but her electroencephalogram revealed moderate, generalized, paroxysmal, high-voltage slowing. Each was experiencing occasional episodes of "light-headedness," as if something serious were going to happen, and each reached a point at which he dared not be left alone, even while in the bathroom. The girl in particular began to withdraw from group activities and finally suffered a temporary emotional collapse, stating that she was "going to die." In both children the symptoms cleared rapidly on an adequate anticonvulsant regimen, and over the course

of a few weeks their personalities again became confident and outgoing.

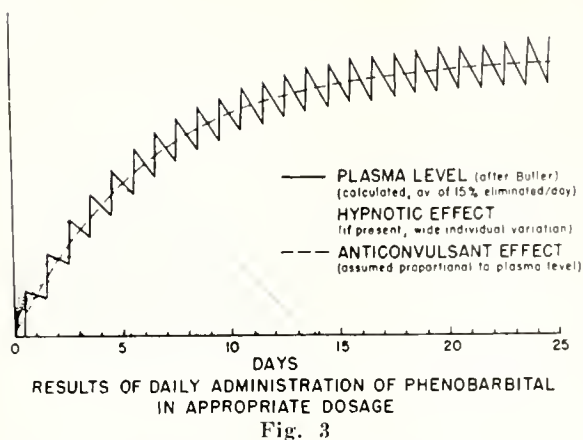
Advantages of Phenobarbital

We believe that phenobarbital is the drug of choice to use first for most children with convulsive disorders. Many others who work primarily with children share this view. We prefer it because toxic reactions are primarily limited to excessive drowsiness, because it is cheaper (weight for weight it costs about half as much as Dilantin), and finally because it need be given only once a day.

This regimen differs from that recommended in many seizure clinics for adults, where Dilantin is usually prescribed initially. Many believe that Dilantin will prove more effective in a somewhat higher percentage of unselected patients than will phenobarbital⁽⁵⁾. Perhaps the primary reason for the preference for Dilantin in adults, however, lies in the hypnotic symptoms which are often produced when phenobarbital is initiated. These may present a real, though temporary, problem in certain occupational situations, such as truck driving. In addition, many adults have heard of phenobarbital and, assuming that it is a form of "dope," prefer to have nothing to do with it. The clinician may circumvent this problem by prescribing mephobarbital (Mebaral), a less familiar drug. This is N-methyl phenobarbital, and it is almost completely demethylated to phenobarbital within a matter of hours after absorption. It is relatively insoluble in water, however, which probably accounts for its poor and variable absorption from the intestinal tract, thus rendering rather unpredictable its anticonvulsant effects⁽⁶⁾.

Limited toxic effects

We have found that, if parents are adequately warned of possible initial hypnotic effects when phenobarbital is prescribed for their child in moderate dosage, they will usually accept these effects if they occur and be willing to wait until they clear. On occasion, if these symptoms are relatively marked, we may temporarily reduce the dosage and later build it up more slowly. Aside from occasional idiosyncrasy (discussed below), the only other adverse effect of phenobarbital is the rare appearance of a pruritic rash. In contrast, Dilantin in excessive dosage produces ataxia, nystagmus, and occasionally diplopia and, even in the



therapeutic dose range, frequently produces gingival hypertrophy and, less commonly, hypertrichosis. Rarely it may produce a dangerous exfoliative dermatitis.

Figure 3 illustrates diagrammatically how, in proper dosage, the hypnotic effects of phenobarbital, if present, will wear off. In general, once the initial five to seven days are passed, tolerance to as much as 5 mg. per kilogram per day can be demonstrated. When high dosage proves necessary it is useful to aim at this figure, although an occasional child may tolerate as much as 6 mg. per kilogram per day without side effects, and another will experience continued mild drowsiness on little more than 4 mg. per kilogram per day. In older children 5 mg. per kilogram per day may amount to a daily dose of 250 to 300 mg. This is a large dose, and understandably we receive an occasional inquiry from a druggist who wonders whether our prescription has been written correctly. Yet we have demonstrated repeatedly that, in poorly controlled cases, phenobarbital may often be pushed to this level with the development of complete tolerance.

One dose daily

Figure 3 also demonstrates the slow rate at which a stable plasma level of phenobarbital is finally achieved. The zigzag line representing the plasma level has been calculated by Butler and others⁽⁷⁾ on the basis of their demonstration that the proportion of phenobarbital eliminated from the plasma each 24 hours averages 15 per cent (their limits, in studying 11 human subjects, were 11 and 23 per cent⁽⁷⁾). Thus phenobarbital continues to accumulate in the body until the daily dose administered

equals approximately 15 per cent of the amount of the drug already present in the body.

Such a graph illustrates two very practical points. First, even though drowsiness may result promptly from phenobarbital administration, the actual body content of the drug is still rising when this hypnotic effect disappears; maximum body content, and with it presumably maximum anticonvulsant effect, is not achieved until approximately three weeks after the initiation of therapy. The graph also demonstrates that the schedule of multiple daily doses so commonly used in prescribing phenobarbital is completely unnecessary. To write phenobarbital *b.i.d* or *t.i.d* would appear to be a useless fad both among physicians in practice and in the institutions for the care of epileptic patients, when one considers that administration of the drug once a day will result in an average daily variation of only 15 per cent in the plasma level. In addition, it is difficult to see how the relatively expensive "long-acting" capsules containing tiny pellets of phenobarbital deserve a place among the many preparations available to the physician.

As implied earlier, the slow rate of elimination of phenobarbital is probably its most valuable feature in the treatment of convulsive disorders in children. We usually advise that the single dose be taken at night before retiring. This becomes an easy ritual for the child over 4 or 5 years of age to remember, and the responsibility for carrying it out can usually quite rapidly be transferred to him. It eliminates the annoying nagging to remember the medicine with which so many children on a multiple daily medication schedule must cope, as well as the risk of its being forgotten in the rush to catch the school bus. More important, the child does not have to carry a pill or a capsule to school, where, day after day, he may try to conceal the fact he is on anticonvulsant medication, in order not to appear "different" from his classmates.

Exceptional reactions

On rare occasions one may encounter an idiosyncrasy to phenobarbital. Instead of initial symptoms of drowsiness the patient experiences an opposite effect, characterized by hyperactivity and relatively uncontrolled behavior. We have now seen this several times among the approximately 300 children

whom we have evaluated for convulsive disorders. One youngster, a 10 year old boy with nocturnal seizures, whose behavior in a well organized family had always been relatively proper, became exceedingly rude and destructive. When confined to his room as punishment, he proceeded to blow a hole with his BB gun through every pane of glass on the second story of his parents' house! This uncommon type of reaction will fade within a few days after substituting another drug in place of phenobarbital.

Supplementary Agents

Dilantin

If an adequate trial of phenobarbital at the highest dosage tolerated without hypnotic side effects proves to give inadequate control, diphenylhydantoin sodium (Dilantin) is usually then added to the patient's regimen, except in cases of *petit mal* epilepsy. Again we find that the calculation of dosage on a weight for weight basis leads a more rapid determination of the highest tolerated dose, if a large dose proves necessary. Ataxia, the most frequent symptom of toxicity, appears at a dosage of roughly 8 mg. per kilogram per day, although this critical level may range as low as 6 mg. per kilogram per day in some patients and possibly surpass 9 mg. per kilogram per day in others. Dilantin unfortunately disappears from the body far more rapidly than does phenobarbital, thus rendering necessary administration at least twice daily for adequate constant control. If high doses are required, this drug probably should be given even more often.

Gingival hypertrophy is also a common side effect of Dilantin, sometimes becoming so severe as to require minor surgery. This, however, is not as clearly related to dosage and, if the drug is to be continued, reduction of the dose, except to inadequate levels, may not solve the problem. Frequent massage of the gums appears to be helpful as a prophylactic measure, and parents of all children being started on this drug are asked to instruct their youngsters to carry this out regularly. A recent report⁽⁸⁾ suggests that antihistaminic drugs may be useful in combatting this complication, but our attempts to demonstrate this have thus far been inconclusive.

Fortunately the majority of convulsive disorders in childhood can be brought un-

der control or greatly improved by phenobarbital, Dilantin, or the two drugs in combination, if the doses are pushed to top levels of tolerance. A study reported in 1952 from the New York Neurological Institute⁽⁵⁾ showed that of 319 patients representing the many types of convulsive disorders seen in their seizure clinic 79 per cent were either controlled or greatly improved by either one of these drugs or the two combined. Only another 6 per cent of the total could be controlled or improved by the addition or substitution of further drugs. It is important to note, however, that the additional drugs used in this study did not include primidone (Mysoline), and experience suggests that the additional 6 per cent might have been a somewhat higher figure had this then relatively new anticonvulsant agent been utilized.

Mysoline and Mesantoin

Except when dealing with *petit mal* epilepsy, Mysoline is usually the next drug to be added to an anticonvulsant regimen in which the combination of phenobarbital and Dilantin alone has proved inadequate. Although a significant proportion of this drug is converted in the body to phenobarbital⁽⁹⁾, clinical experience indicates that the anticonvulsant effect of Mysoline in some patients is far greater than can be accounted for by this conversion alone. Mesantoin, another hydantoinate, also is helpful in patients whose seizures prove difficult to control. On rare occasions, however, it may result in agranulocytosis or aplastic anemia. Mainly for this reason we have rarely used it.

Treatment of Petit Mal Epilepsy

It is well recognized that phenobarbital is less likely to be effective in *petit mal* epilepsy than is trimethadione (Tridione). Because the latter drug may also rarely exert a depressant action on the bone marrow, we again prefer to try phenobarbital initially. If this does prove to be effective, then the necessity of frequent leukocyte counts and differential smears is obviated. Methylphenylsuccinimide (Milontin) may also be of value in *petit mal* epilepsy, but, although it apparently produces no dangerous toxic effects, most clinicians have found it considerably less effective than Tridione.

General Principles of Therapy

In the final analysis the key to success in prescribing adequate anticonvulsant therapy in the majority of cases appears to lie in pushing the most frequently used drugs (phenobarbital and Dilantin) to tolerance when necessary and in using them over a long period, usually several weeks, to achieve an adequate evaluation of their effectiveness.

The proper utilization of anticonvulsant drugs is obviously only one phase in the total treatment of the child with recurrent seizures. This is not the place to amplify the role of neurosurgery in the removal of sharply localized foci in children with uncontrollable convulsions. It should be noted, however, that the modern neurosurgeon, working in close collaboration with the neurophysiologist, has shown us that even total hemispherectomy may be an exceedingly valuable procedure in the handling of carefully selected patients with infantile hemiplegia and associated intractable convulsions^(10,11).

The role of the physician extends far beyond the proper prescription of drugs. It is his duty to allay the fears, and often the guilt feelings, of the child's parents. As has already been pointed out, with the exception of cautioning against swimming alone or driving a farm tractor or truck, the physician must impress upon the parents the need to handle their epileptic child like any other child, rather than to worry lest he become fatigued or overexcited. The parents must come to realize how frequent the problem of epilepsy actually is and, particularly when there is no gross evidence of brain damage or mental defect, to understand that their child is fundamentally no different from his playmate. Letters to school teachers, camp counselors, and others are often necessary. For, as was originally stated, a large share of the problem of convulsive disorders in children remains a matter of education.

Summary

The general aspects of the etiology of convulsive disorders in children have been discussed. It is suggested that medical research will gradually uncover many of the causes of what we now call idiopathic epilepsy. Practical points of anticonvulsant therapy are reviewed and the reasons for preferring phenobarbital in the treatment of children are summarized. Broader concepts of management are also mentioned, and it is stressed that parents must be taught to regard their epileptic children as normal youngsters.

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Progressive Myositis Ossificans

Review of the Literature and Report of a Case

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Progressive myositis ossificans is a rare disease. In 1945 Ryan⁽¹⁾ reviewed the literature and found 160 cases reported since it was first described by Patin in 1692.

This disease is characterized by progressive, widespread ossification of soft tissue (primarily muscle and tendon)—leading to crippling immobility.

Pathology

According to Geschickter and Masseritz⁽²⁾, the earliest histologic findings consist of degeneration and necrosis of muscles and concomitant hyperplasia of surrounding connective tissue. Islands of osteoid tissue spring up and become invaded by osteoblasts; cartilage may also be formed. Many pathologists believe that the muscles are involved secondarily to the initial process, which affects the connective tissue of the fascia and tendons as well as the intermuscular septa—the necrosis of muscle bundles being the result of pressure from the surrounding ossified tissue. Singleton and Holt⁽³⁾ thought this was the case in the patient reported by them, since immobilization was almost as marked when the patient was first seen (with minimal calcification) as it was later when massive calcification ensued. This is also true of the case reported in this paper. A histologic examination made at Duke Hospital within the first year of the disease revealed "fragments of striated muscle with areas of connective tissue proliferation and chronic inflammatory cell infiltration. There is no evidence of calcification." The consensus seems to be that the disease represents an inborn error of metabolism or a primitive mesenchymal defect.

Etiology

The etiology is unknown. Trauma is frequently followed by isolated areas of calcification but is not established as a cause of progressive myositis ossificans.

There are no significant blood chemistry abnormalities. There is a slight suggestion of an hereditary influence. Vastine and others⁽³⁾ reported a case in homozygotic twins.

Rosenstirn⁽⁴⁾ says that cases have been reported in animals.

Clinical Aspects

MacKinnon⁽⁵⁾ has stated that initial symptoms were noted during the first year in 16 per cent of the cases and during the first five years in 68 per cent.

According to Rolleston⁽⁶⁾, the disease is five times as common in males as in females.

Congenital osseous anomalies are frequently present, the great toe being most frequently involved (hallux valgus and microdactylia). Microdactylia of the thumbs is slightly less common.

Lesions most often involve the muscles and tendons of the neck, shoulders and humerus, and muscles attached to the spine and thoracic cage. The hands and lower extremities are less often involved. No cases involving the tongue, myocardium, larynx, diaphragm, or sphincters have been reported. There are no motor or sensory changes⁽⁶⁾.

Differential Diagnosis

Actual bone formation distinguishes this disease from myositis fibrosa, dermatomyositis, polymyositis hemorrhagica, multiple exostoses, and calcinosis interstitialis ossificans. No bone formation occurs in the other diseases except in multiple exostoses and here the bone is attached to the bony skeleton⁽¹⁾. Singleton and Holt⁽²⁾ performed biopsies of bone from the pectoralis which showed trabecula bone and marrow cavity.

According to Ryan⁽¹⁾, the prognosis is grave: the patient seldom lives to age 15 if the onset occurs in infancy. Patients usually die of pulmonary infections because of immobility of the chest. Treatment is not satisfactory. X-ray, parathyroid extract, beryllium carbonate, low calcium and ketogenic diets, and surgery have been employed without success.

Dixon, Mulligan, and others⁽⁷⁾ removed a piece of ectopic bone and followed this operation by prolonged administration of adrenocorticotrophic hormone and cortisone



Fig. 1. Note the large bars of bone in the suboccipital muscles. Note also the partial fusion of C2 and C3, C4 and C5, C6, and C7.



Fig. 2. Posterolateral view of the chest showing extensive ossification in muscles attached to chest. Note heavy ossification in axillary folds.

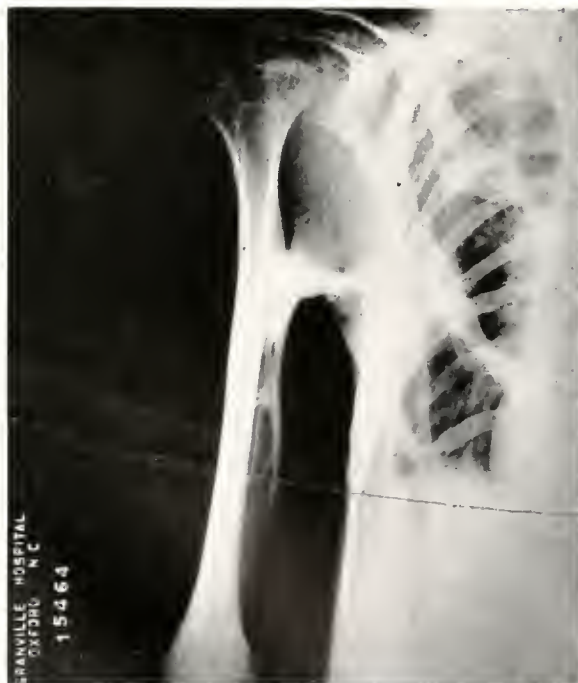


Fig. 3. A close-up view showing ossification of muscles of the right axillary fold and muscles of the humerus. Note the disuse atrophy of the upper end of the humerus.



Fig. 4. A plain flat plate of the abdomen. The large bars of ossified muscle are located in muscles of the abdomen (obliques and recti) and of the spine.



Fig. 5. The distal ends of the first metatarsal arch are deformed, as are the first phalanges of the great toe. Hallux valgus is also present.



Fig. 6. Lateral view of the abdomen. Note the network of bone in the recti and oblique muscles of the anterior abdominal wall.

—only to find ossification recurring in nine weeks.

New chelating agents might conceivably be worthy of a trial.

Report of a Case

(All roentgenograms shown here were taken seven years after the onset of the disease).

A white girl showed the initial symptoms of myositis ossificans at 6 years of age, when a bony tumor appeared on her knee following a fall from a bicycle which injured her knee.

When the child was 7 years old, her mother first noticed a lump on the back of her head (not preceded by known trauma). Approximately one month later a large area of swelling and induration appeared on the posterior cervical region. This process rapidly extended into the trapezius muscles of both sides, then into the shoulder and chest muscles. Limitation of movement in the involved muscles occurred early.

The following sequence of events has been taking place through the years. The process is initiated by the appearance of swellings of varying size. These swellings are



Fig. 7. Lateral view of abdomen. Note the network of bone in the recti and oblique muscles of the anterior abdominal wall.



Fig. 8. Photograph showing many bone protrusion in soft tissue areas.



Fig. 9. The darkened swelling below the left scapula is an open area where ectopic bone has actually penetrated overlying skin.

firm. They progress in size for approximately one week, remain stationary for approximately one week, then regress during the period of a week, leaving stony hard areas in the muscle. This process keeps recurring in the same area until the muscle is ossified and immobilization is complete. Occasionally the swellings are of purplish hue. They have never spontaneously drained. Overlying skin becomes waxy and taut.

The involved muscles became immobilized quite early in this case. Virtually all the deformity and immobility occurred during the first year of the disease. There was never any fever, malaise, or pain.

Blood chemistry studies and electrocardiograms have continued to be within normal limits, as was an electroencephalogram made at the inception of the disease.

The patient was treated shortly after the onset of illness with ACTH, cortisone, and x-ray at Duke and Johns Hopkins hospitals without deriving any definite benefit. For the past five years her mother has given her soda water (NaH_2CO_3) three times daily and Amphogel. She has had no other

treatment. Her disease has been rather quiescent for the past five or six years.

The patient is now making excellent grades in the eighth grade of school, and is well adjusted mentally to the disease in spite of severe crippling deformities. She began menstruating at 13 years of age and is developing pubic hair. She has had to have several dental cavities filled, and the last relapse followed an extraction. A firm submental tumor appeared, but gradually subsided over a period of two or three weeks.

The family history is remarkable in that several members of her father's family have had trouble with their feet — in several instances requiring operative procedures.

The fact that this case is being reported approximately seven years after the onset of illness—therapy affording probably one of the longest follow-up studies yet reported—justifies its conclusion in the literature. It is also unusual in that the patient is a female. Finally, the amount of ossification in the abdominal muscles is probably unequaled by an other case reported.

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The Usefulness of Radioactive Gold 198 and Phosphorus 32 in Malignant Disease

WILLIAM H. SPRUNT, III, M.D.

CHAPEL HILL

The number of cases of malignant disease in which we have utilized gold 198 and phosphorus 32 in our institution is small and inadequate for significant statistical evaluation; hence I will show no slides. The size of our series has not prevented us from drawing certain conclusions, perhaps better termed impressions. It may be more correct to say that I will present our experience, since someone has defined experience as the name we give to our mistakes.

Radioactive Gold

The effectiveness of gold 198 in the palliation of malignant serous effusions is now well established, and the results in our small series of 14 cases are like those reported in general: about 50 per cent are either improved or greatly improved, and about 50 per cent of those treated have had no relief. Once the diagnosis of a malignant effusion is proven, preferably by histologic examination, it is a simple matter to remove most of the fluid and inject 100 to 200 millicuries of gold into the peritoneal cavity or 50 to 100 millicuries into the pleural cavity. Our dosages usually approach the larger figures. We have not used gold intrapericardially, but doses reported in the literature are from 12 to 120 millicuries, varying with the size of the effusion. Patients in this group experience little discomfort from the injection of gold and have little radiation sickness.

When used in this way, gold 198 is con-

traindicated only in a terminal illness. I am sure that the demise of 4 of our patients—those who died within a month of therapy—was hastened by the gold. The presence of liver metastases presages difficulty, I believe, possibly because these patients are more debilitated.

We have injected gold 198 palliatively or therapeutically into 8 patients with ovarian carcinoma. From the nature of the disease, the small series, and the short follow-up period, we can make no predictions about results. Patients in whom the primary lesion can be resected but who have ascites, spill of cyst contents at operation, and no evidence of metastases are treated with radioactive gold palliatively. Those with metastases or an inoperable primary tumor are treated with gold 198 and deep x-ray therapy. The dosage of gold which we have used is similar to that used for effusions. There seems to be a trend toward larger doses today, even in the range of 300 or 400 millicuries, and we await reports of larger groups of cases before we adopt this method of therapy.

We have learned to warn the patients who have no ascites to expect a good deal of discomfort following the gold injection, both locally and systemically. This is true even though moderately large amounts of saline are injected preceding the gold (500 to 750 cc.). Perhaps the fact that we do not actually dilute the gold for injection, in order to handle it as little as possible, may be an influential factor in this discomfort. A better explanation may be that the fibrinous exudate present on the peritoneal

From the Department of Radiology, University of North Carolina School of Medicine, Chapel Hill.

Read before the Section on Radiology, Medical Society of the State of North Carolina, Asheville, May 8, 1957.

surface when ascites is present provides some protection against the beta radiation.

We have had no experience with the injection of chromic phosphate (P32) or yttrium 90 nor with the localized injection of radioactive gold for carcinoma of the cervix or prostate.

At least one investigator feels that the gamma radiation from gold contributes significantly to the results in the treatment of malignancy and hence is a better agent than the pure beta emitters. This remains to be proved. Some also feel that the beta radiations from phosphorus 32 are so powerful that they may damage the bowel wall and that the weaker betas from gold are not likely to do this.

Phosphorus 32

Phosphorus 32 emits only beta radiations, averaging in intensity 0.7 mev. In tissues the maximum range is 8 mm. and the average range is 2 mm. This material has been used therapeutically longer than any other radioactive isotope since it was produced by Lawrence in 1930. In our institution it has been utilized chiefly for the treatment of polycythemia vera.

In diagnosing this condition and evaluating the patients, I depend a great deal on the opinion of our hematologist, Dr. Jeffress Palmer. Once the diagnosis is established, the fresh case can usually be carried for some time in remission by phlebotomy alone. Sooner or later some other type of therapy will become necessary, and phosphorus 32 is a useful agent. Our dosage varies from 3 to 5 millicuries given orally depending upon the size of the patient and the red count. If the dosage is given intravenously, we use about 25 per cent less.

Since the circulating erythrocytes are not affected by the phosphorus and no remission is obtained until the effect on the marrow becomes evident, there elapses an interval of 60 to 90 days, which may be a dangerous period for the patient. In order

to minimize the risk of thrombosis during this period, phlebotomy is carried out immediately before the phosphorus is given.

In our small series of 6 patients the follow-up period has been too short for adequate evaluation. We have had remissions for over a year, and even three-year remissions are not uncommon in the literature.

There is still discussion about the possibility of increasing the incidence of leukemia following radiation therapy. Since the treated patients live virtually a normal life span and do not die of the complications of peptic ulcer or thrombosis in a vital area, more of them will live to develop leukemia. But the risk is so small for the good that is like to come from therapy that it seems well justified.

A remission is identified by a red blood cell count of less than 6,000,000 and a hematocrit of less than 50, with improvement in symptoms. The patient is followed at intervals of two or three months until these values begin to increase and then is treated again, preferably without waiting until some of the unpleasant symptoms return. The original dose can usually be repeated with safety.

The usefulness of phosphorus 32 in leukemia has decreased lately with the increasing number of empirically discovered compounds which give excellent therapeutic results in this disease. No type of radiation is indicated in acute or subacute leukemia. In chronic granulocytic leukemia phosphorus 32 is generally conceded to be most valuable of the radiation agents since it does not produce radiation sickness. In chronic lymphatic leukemia it seldom produces complete regression of large lymph nodes or spleen, and in both these conditions the judicious, local use of deep x-ray therapy is a valuable supplementary agent. In neither has the cure rate been definitely increased by this agent nor by any other.

The Medical Spectator

The year 1957 has had its moments, and even though two months remain, it seems appropriate to know what to give thanks for a few days ahead of time. For example 1957 has been the year that British workers reported their experiences with tranquillizing drugs and found their results were rather less striking than those on this side of the Atlantic. The differences were so marked that our English colleagues felt called upon to consider the enthusiasm of of the American physician a real factor in determining the therapeutic effects of these agents. Since our pharmaceutical houses cite personal communications to confirm the benefits of their newer contributions to world peace, it is only fair to note that 1957 has also been the year that many personal communicators have rediscovered phenobarbital.

The American people seem to be sharing the general disenchantment. Vance Packard's startling and provocative study of the

application of the methods of psychology and psychiatry by advertising agencies for consumer seduction, *The Hidden Persuaders*, has led the non-fiction best seller list for some weeks and is now sharing honors with the first volume of Bernard Baruch's autobiography; Mr. Baruch is certainly one of the tougher minded Americans of any generation. *The Hidden Persuaders* is really a study in the epidemiology of consumption and reminds me of George Bernard Shaw's preface to *A Doctor's Dilemma* in which he notes that "fashion is an induced epidemic."

No sooner had Packard's study been published than the depth analyzers and motivational researchers rediscovered subliminal stimulation. The idea is that a stimulus below the threshold of any sensory modality is picked up by the unconscious which passes the word on to consciousness. The latter is then possessed by an overwhelming desire to gratify the demands of "the invisible commercial." Hence a captive audience without chains.*

What does all this have to do with medi-

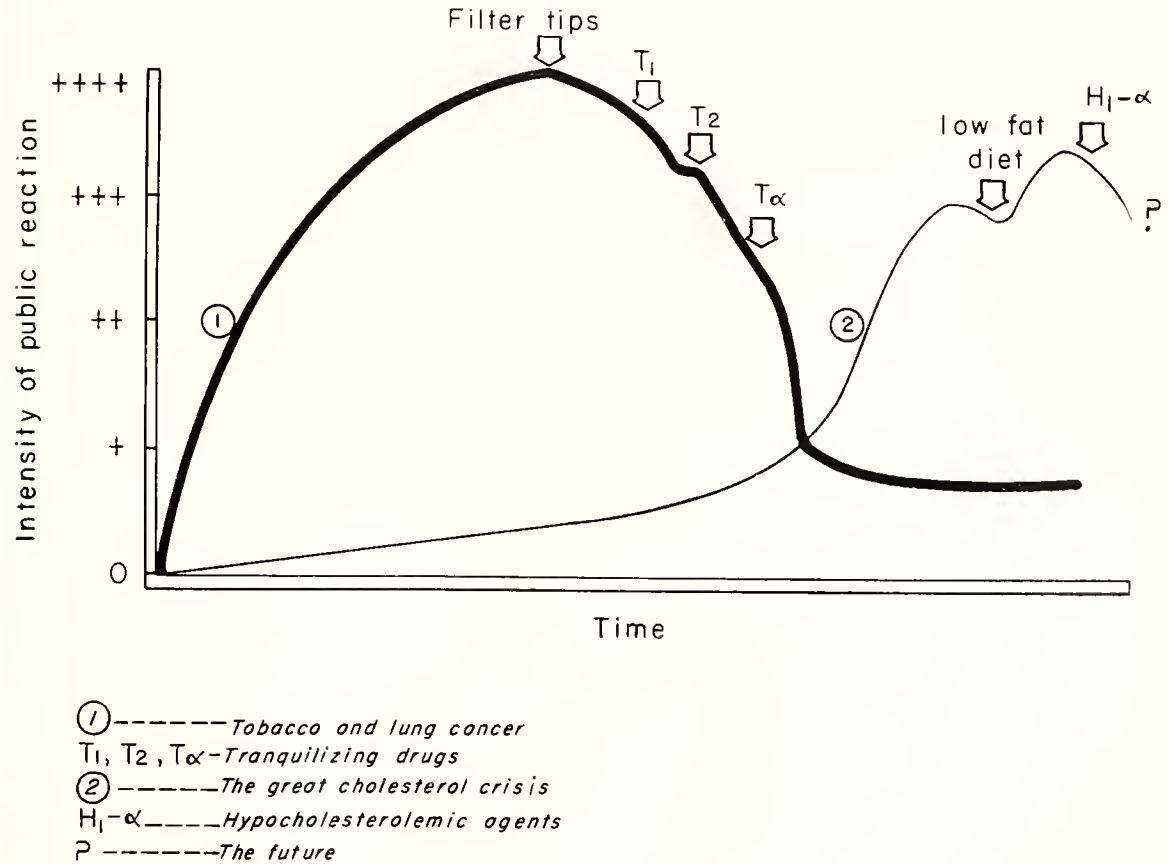


Fig. 1

cine? Well, if brokers and investment publications are any yardstick, the old saw about building a better mouse trap has been rephrased in terms of pharmaceutical house research. Find a new drug and profit, as witness the summer spurt of Olin Mathieson stock when its subsidiary, Squibb, was rumored to have a new cancer cure.

When inducing a new drug epidemic among physicians, two mathematical processes, addition and multiplication†, are used.

$$1_2 \text{ Truth} \times 1_2 \text{ Truth} = \text{Truth} \quad (1)$$

If this equation is not sufficiently alluring, take several personal communications and cite several "mights" from published works dealing with the drug or, preferably, dealing with diseases which the new drug is supposed to effect. This becomes

$$\text{Might} \times \text{Might} \times \text{Might} = \text{Right} \quad (2)$$

Taking equations (1) and (2), the new drug is true and must be used because it is wrong to deny patients the benefits of (1) and (2).

Most of us are aware of the Pel-Ebstein fever curve of Hodgkin's disease and some

of us claim knowledge of some of the cyclic aspects of the body's activities. We also realize that consumer wants are often cyclic. (What happened to Hopalong Cassidy?) The problem then becomes one of inducing fervor and selling or provoking fear and reassuring. For this approach we graduate to statistics, a true jungle for most of us. We can graph a situation in this manner. (See fig. 1).

Crises 1 and 2 are based on a hitherto unpublished premise: eliminate cancer of the lung or atherosclerosis and live forever. Since the lay press has already taken command of crisis 1, only crisis 2 will be considered in the next issue.

*One method is to project a word on a motion picture screen at a light intensity less than that of the movie so that the viewer doesn't have to read or he interrupted to receive the message. Obviously the variations are legion and the complications even more interesting. Imagine a patient presenting as chief complaint, "I think I'm seeing (hearing, feeling, testing, smelling) things, but I'm not sure." Soon threshold raising drugs to protect the consumer or threshold lowering drugs to allow recipients to get the message more clearly can be expected. Already drugs said to block hallucinations are available.

†To be faithful to medical jargon, one may substitute hyperplasia for multiplication.

The professional schools should demand more of the colleges if they would strengthen themselves. Colleges must demand more of the high schools, offering at the same time direction and encouragement. The high schools must do the same thing for the primary schools. Now each level is lowering its standards to compensate for the deficiencies of the preceding level. This policy of initiating high-school courses in colleges, for example, is intended as an honest effort to improve the educational process, but in reality is the most insidious and destructive line of action possible. It ensures that high schools need offer essentially nothing of real academic merit and that their students need never learn how to learn. It guarantees the colleges the right to demand larger budgets, more buildings and larger lower divisional staffs to do the job that belongs to the high school, with the resulting neglect of their own duty.—Lyman, R. A., Jr.: Disaster in Pedagogy, *New England J. Med.* 257:505 (Sept. 12) 1957.

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THE GOVERNMENT PRESCRIBES

Ever since the National Health Service was begun in Great Britain, the dissatisfaction with it has been steadily increasing to the point of bitter resentment of the government's role in the Service. An editorial in the *British Medical Journal* for September 21 voices this resentment. Though the British laboratories have not produced nearly enough polio vaccine to meet the demand, and though the *Journal* argued for importing American vaccine last may, the Minister of Health refused to consider importing polio vaccine from America until the week before the *British Medical Journal* appeared.

The editor of the *British Medical Journal* is righteously indignant because recognized medical groups are not consulted about such medical problems. "Instead, there are various groups of distinguished advisers

whose advice is sought, and given, under conditions of secrecy more appropriate to the negotiation of a treaty with a nervous foreign power. At intervals the curtain is drawn aside and a Government spokesman utters an announcement that is apt to be oracular rather than illuminating. Usually his words are addressed not to the medical profession but to the public—or, as it is sometimes called, the electorate. This system has no doubt grown up without much thought about where it is leading, but its results so far are not reassuring. One consequence of it is that medical decisions of great moment to individual patients are made without their doctors being able to explain them fully or even to put before their patients all the arguments for and against."

Politicians the world over share many common characteristics. There is little doubt but that in this country doctors under a government controlled medical service would get much the same treatment as our British cousins. Already there has been more and more encroachment on the private practice of medicine. Let us hope that it will go no further.

* * *

THE BIENNIAL REGISTRATION ACT

On page 467 of this issue will be found a copy of the bill passed by the 1957 Legislature, requiring all licensed physicians in the state to register every two years, with the secretary of the Board of Medical Examiners, his name and both his office and residence address. The time for registration is January of the even-numbered years. The bill as drawn has the distinction of brevity and clarity. Every licensed physician should read it and prepare to register next January.

There were a good many who thought this act would impose an unnecessary hardship on overworked doctors, but the members of the Board gave the matter long deliberation and were convinced that the need for such a biennial roll call was great enough to outweigh the disadvantages. May every member of the Society fill out his registration card with all reasonable cheerfulness.

FOR SAFER HIGHWAYS

For too many years the appalling number of deaths and injuries on our highways has, like the weather, been the subject of much talk but little action. Recently, there have been indications that something is being done. The Cornell Crash Injury Program is beginning to bear fruit. A recent *This Week* interview with the director of this program, Mr. John O. Moore, was really optimistic about the progress made and about future steps for increased safety in automobile construction. It is gratifying to know that Mr. Moore is a native of North Carolina, and that this state was selected for a pilot study, which is still in progress.

It is fitting that the medical profession of Michigan, where most automobiles are made, should take special interest in traffic control. The Michigan State Medical Society has formed a Committee on Study of Prevention of Highway Accidents. The September issue of the state *Journal* is devoted to traffic safety. The leading editorial, by Dr. J. R. Rodgers, chairman of the committee, points out that the problem is not as bad as it has been painted. When based on the number of vehicle miles, it is two and a half times as safe to be on the highways as it was in 1934 and 1935. While it is true that 38,000 were killed on the highways in 1955, the number would have been 95,000 at the 1935 rate. If, however, the estimate of the experts that within the next 10 or 15 years there will be an increase of 45 per cent in vehicle mileage comes true, "we shall have to reduce the accident rate by nearly 50 per cent from what it is now in order even to just stand still!"

The nine articles on traffic safety in this issue covered a wide range of subjects—from whiplash injuries to emotional problems in driving. Among the recommendations for reducing traffic hazards were: more careful examination of drivers; building public support for firm, impartial law enforcement; the more general use of chemical tests for alcohol concentration in the blood; the use of more safety factors in building automobiles, such as seat belts, improved door locks, padding on the instrument panels, and energy-absorbing steering wheels; limiting the speed of ambulances; and cultivating the proper emotional attitude in driving.

We still have great need for improvement in our driving habits; but it is encouraging to know that serious study is being given to the menace of the highways.

* * *

WHAT PRICE PATIENT RESPONSIBILITY?

The leading editorial in the September *Journal of the Medical Society of New Jersey* is so pertinent that it is quoted in full, without comment.

* * * *

"The current trend is to emphasize the patient's responsibility for treatment. For certain chronic illnesses, such as diabetes, mucous colitis, and some of the psychoneuroses, good prognosis correlates well with the patient's willingness to take active responsibility in treatment. This is also used as an argument in favor of compulsory health insurance. The theory is that the patient ought to be compelled, if necessary, to assume some financial responsibility for his own medical care. Instead of letting him become a charge on the community, on relatives, or on the charity of physicians, insist that he set aside some money every pay day to buy health insurance. This is, in a way, a queer reversal of roles. The people who favor compulsory insurance are usually thought of as "liberal" and "welfare minded." In this thesis, the proponent of compulsory insurance speaks that way because he objects to too much liberalism and liberality.

"Be that as it may, there is increasing emphasis on patient responsibility for carrying out a therapeutic program. At first it does seem as if the patient should share in therapeutic responsibility. The reverse, certainly, is untenable: you cannot expect a physician to make progress with a resistant and non-cooperative patient. With respect to the patient's assumption of part of the therapeutic burden, however, there is something to be said *contra*. When a patient retains a doctor, one of the things he is paying him for is to take over the responsibility. One of the reasons doctors get deference is that they assume awesome responsibilities. If a sick physician is to be considered a "good patient," his goodness will consist of his not wanting to know what medication he is getting, or even what the laboratory tests show. The hope is that he will abandon all such responsibil-

ity to his attending physician—rather than add to his own burdens. This is surely true, *a fortiori*, of the non-professional patient.

"Part of the healing effectiveness is the patient's faith in the physician's magical powers. 'Everything is now all right. The doctor is here.' We physicians know that we do not always deserve such acceptance . . . but we also know that this kind of faith contributes to the healing process. Implicit in this faith is the patient's willingness to relax while the doctor makes the decisions. A physician might say: 'You ought to lose weight, but you should not frustrate yourself by too much denial. Think it over and decide whether the frustration is more bothersome than the obesity.' Or he might say: 'This new medication will lower your blood pressure but it will also make you a bit sluggish. Do you prefer it that way?' In each case, the patient has to shoulder the burden that he is paying the doctor to carry. What the patient wants (even if he says otherwise) is a clean-cut definite, spelled out program to follow. He does not really want to be a member of a steering committee to decide on the next course. He wants to be free of the weight of decision-making.

"So the doctor must decide. And no matter how many consultants he has, the treating physician must, in the last analysis, make the decision solo. And he must take full responsibility for it. It is a lonesome, and sometimes terrible load. But who ever undertakes to treat the sick assumes just that burden."

* * *

THE SPEEDING AMBULANCE

In the Traffic Safety number of the *Journal of the Michigan State Medical Society* (September, 1957) Drs. George J. Curry and Sydney N. Lyttle, of Flint, had a short but impressive paper on "The Speeding Ambulance." Some of our faithful readers may recall that this JOURNAL has protested editorially against the menace of the ambulance⁽¹⁾. It is gratifying to know that the *Michigan Journal* takes the same view.

In 1941 an ordinance was passed requiring certification of ambulance attendants, but permitting the drivers to speed if they thought it necessary. When several ambulances were summoned to the scene of an

accident, the last to arrive usually left empty-handed—so in such a case the drivers naturally thought it necessary to speed.

In 1949 within three weeks two speeding ambulances crashed into other cars, and in both accidents the ambulance drivers were killed. As a result, new regulations were adopted, assigning specific zones to ambulance operators, and limiting the top speed of the ambulance to 35 miles per hour.

The authors state that "An ambulance averaging 30 miles per hour would require 10 minutes to travel five miles. To save five minutes, 60 miles per hour would be necessary. In 2,500 consecutive ambulance runs this time interval would not have influenced the course of a single injury." The authors added, however, that 36 victims were in severe shock upon arrival at the hospital, and that "the degree of shock may have been increased by a rough ride in the ambulance."

As a matter of fact, every doctor in active practice has just as much right to use a siren and be exempt from traffic regulations as the ambulance driver; but what doctor wants this privilege, with its corresponding hazard and responsibility?

Reference

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* * *

THE MEDICAL SPECTATOR

The NORTH CAROLINA MEDICAL JOURNAL is pleased to introduce on page 465 of this issue a new feature to be known as The Medical Spectator, a series of personal comments on the contemporary medical scene. The title, as may be surmised, was suggested by the well known Spectator papers of Addison and Steele. Contributions will contain observations on current trends in diagnosis and treatment, medical education, economics, new drugs, medical facts and fashions, and other topics of interest to the physician—in short, anything which may happen to catch the Spectator's eye.

It is hoped that the new feature will prove informative, entertaining, and provocative of independent thought and observation. The views expressed are entirely unofficial, and the reader is invited to agree or disagree according to his own lights. Blind conformity in medicine as in other fields of endeavor is no friend of human freedom and progress.

President's Message

UNNECESSARY LABORATORY TESTS

Some of our hospitals have urged their staff members to be more conservative in the number of laboratory examinations requested and in certain instances have limited their routine testing to a hemoglobin estimation, white blood cell count, and urinalysis, other tests, of course, to be done on order of the physician as deemed necessary by him. This routine has been adopted because of the shortage of laboratory technicians and other personnel.

It occurred to this writer that if we can get along with less extensive laboratory testing as a rule, it will not only save time but may materially reduce the cost of hospital care, a consideration which will appeal to the public in no uncertain terms. No modern physician wants to see a step backward, but many of us know doctors who seem to go to great lengths to accumulate laboratory data which are frequently unnecessary and increase the consternation of the patients when he gets his bill.

It was interesting to read an editorial along these lines which appeared in the Westchester, New York, *Medical Bulletin* last November. In this article the physician was warned not to be ultrascientific and urged not to run too many laboratory tests. Although this approach is necessary at times and may be psychologically sound, it should not be overused. In other words, we should not fall into the habit of doing TOO much to our patients and not enough FOR them.

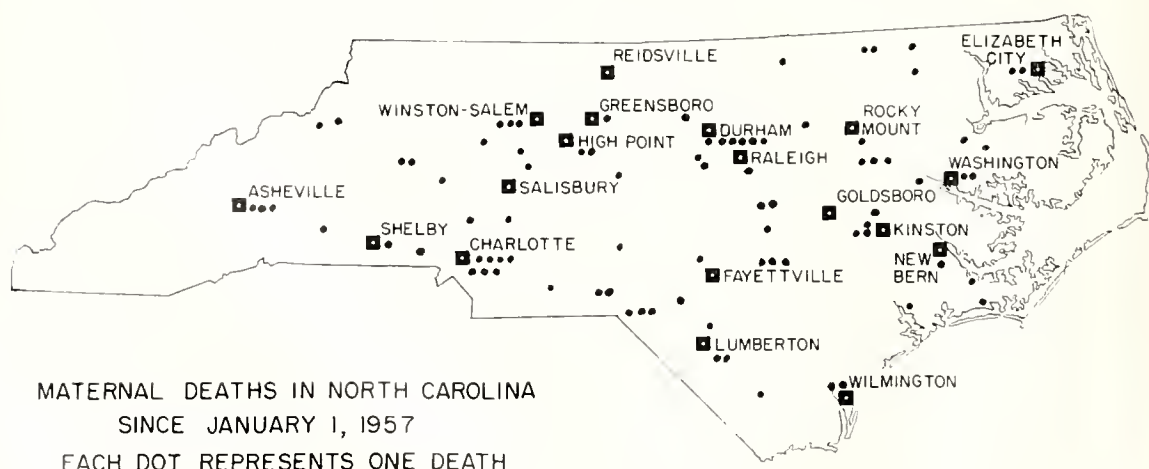
The physician is urged to be bold enough to try to arrive at a diagnosis by means of a careful history and physical examination and simple laboratory tests and to follow this with advice and treatment before going into an expensive work-up. A cure may be reached in this manner without great cost to the patient and may consist merely of medication, physiotherapy, and reassurance.

I hope this will be interpreted not as a recommendation for a step in the wrong direction or for a superficial type of practice but as a plea to consider the patient's pocketbook as well as the technician's time and to urge greater employment of the God-given graces with which we are all endowed.

This reminds me of a quotation from one of our great surgeons at the turn of the century, Dr. W. W. Keen: "With all our varied instruments of precision, useful as they are, nothing can replace the watchful eye, the alert ear, the tactful finger, and the logical mind which correlates the facts obtained through all these avenues of information and so reaches an exact diagnosis."

The physician of previous generations had no choice but to follow the instinct of his five senses. However, we have neglected this resource because of the more elaborate facilities of today.

EDWARD W. SCHOENHEIT, M.D.



Committees and Organizations

BOARD OF MEDICAL EXAMINERS

The following comprises the text of a bill to be entitled an act to amend chapter 90 of the General Statutes so as to provide for the registration of licensed medical physicians every two years with the Board of Medical Examiners of the State of North Carolina.

The General Assembly of North Carolina do enact:

Section 1. Chapter 90 of the General Statutes is hereby amended by adding thereto a new section to be designated as G.S. 90-15.1, and to read as follows:

"G.S. 90-15.1. Every person heretofore or hereafter licensed to practice medicine by said Board of Medical Examiners shall, during the month of January, 1958, and during the month of January in every even-numbered year thereafter, register with the Secretary-Treasurer of said Board his name and office and residence address and such other information as the Board may deem necessary and shall pay a registration fee fixed by the Board not in excess of five dollars (\$5.00). In the event a physician fails to register as herein provided he shall pay an additional amount of ten dollars (\$10.00) to the Board. Should a physician fail to register and pay the fees imposed, and should such failure continue for a period of thirty days, the license of such physician may be suspended by the Board, after notice and hearing at the next regular meeting of the Board. Upon payment of all fees and penalties which may be due, the license of any such physician shall be reinstated."

Section 2. All laws and clauses in conflict with this Act are hereby repealed.

Section 3. This Act shall be in full force and effect from and after January 1, 1958.

NEW SOCIETY MEMBERS

The following new members joined the Medical Society of the State of North Carolina during the month of September, 1957:

Howard Binning Norton, M.D., Route #1, Horse Shoe; Henry Curtis McGown, M.D., Chestnut Circle, Blowing Rock; Otis Nigel Lowry, M.D., N. Hillsboro Street, Franklinton; Garland Earhart Wampler, M.D., Buxton.

THE COMMITTEE ON PUBLIC RELATIONS

PRIVATE PRACTICE OF MEDICINE VERSUS THE SOCIALIZATION OF MEDICINE

BARBARA UNDERWOOD

WINSTON-SALEM

Preface

As a prospective doctor, I am very much concerned with the system of medical practice in the United States. I must admit that after studying available information for and against state medicine, I have found many reasonable arguments for this new system of practice. However, keeping all facts and circumstances in mind, I do not believe that state medicine would ever be as successful as our present private system.

In my paper I have tried to present both sides of the question and leave the conclusion to the judgment of the reader. I myself think any attempt to force state medicine on the doctors of America would be extremely unjust, and I should never like to practice under such a system.

* * *

What is state medicine? It is a system by which medical services are furnished by government employees who are paid out of tax funds, much as a public education is furnished by teachers employed by the government and paid out of public funds. This government-provided medicine is not a new and revolutionary idea. Industrial medicine, Blue Cross, public health work, state mental and tubercular care, veteran aid—all these are merely unenlarged forms of socialized medicine. This system is not untried in other countries. Russia, New Zealand, Great Britain and Sweden have tried the system in one form or another. The following paragraphs will contain the arguments of the advocates of a change in our medical system.

The Case for State Medicine

Is there a need for a change? Our present system does not give adequate care. Very few mothers are trained for childbirth or receive sufficient care, uncorrected physical defects are too prevalent among young children, and America's dental health is still in pitiful condition. The inadequacies are attributed to the poor distribution of

Prize-winning essay read before the First General Session, Medical Society of North Carolina, Asheville, May 7, 1957.
From Reynolds High School, Winston-Salem.

physicians because of better wages and hospital facilities in some areas and to the method of private payment for services.

A better system of payment for medical service is needed. People with lower incomes usually have more sickness than others, and, when they become ill, what income they have stops. Often doctors will not give care unless the patient can pay, and, even when this is not true, some patients do not like to accept charity. Medical expenses fall too unevenly to be budgeted by even some middle-class families, for costly specialists are often necessary. Many times a great deal of money is wasted on quack remedies to eliminate paying for these costly services. The sliding system of payment is unjust, for the poor do not wish to be charity cases, the wealthy should not bear the whole cost, and doctors cannot always judge fairly a patient's ability to pay.

Voluntary medical insurance will never relieve the problem, for it fails to reach those people who need care most and are usually unable to pay. Plans such as Blue Cross are not sufficient because they cover only hospitalization — no dental care or preventive medicine is provided.

Management by individual states is not suitable, for the considerable amount of travel would complicate this too much. Industrial medicine does not give coverage for workers' families and therefore could not work.

There seem to be endless advantages to state medicine. So much stress would be put on prevention that a doctor would actually penalize himself by allowing a disease to occur. Doctors could care for patients and disregard their ability to pay. They would have better and more modern equipment and would be more widely scattered. A young physician would not have to struggle in building a practice or go into debt buying expensive equipment. Patients could still choose their doctors, though a patient's first concern is service, not personal contact. This new system would also eliminate the trend toward quack medicine.

The state medicine setup could be compared with our public school system. Our schools are not regimented or overcontrolled by the government. People would still be allowed to use the private system of medicine as both public and private schools are used today. The program could be easily financed with a 4 per cent pay-

roll tax so spread out that it would not even be noticed.

After all, in these modern times, the health of the people is the concern of the nation, not just of the family. Communicable diseases and absences from school and work must be cut down. The welfare of our armed forces is extremely important in these crucial days.

The Case for Private Medical Care

Now the negative side of state medicine is presented, with a defense of our present medical system.

There is no need for a change. If medicine were to be taken over by the government, people who really need not be concerned at all would be involved. Preventative medicine and care for the indigent is a public matter, but curative medicine should be completely private. There are many serious causes of sickness which government investigation and aid could abate without socialized medicine, such as the lack of food for many; slum conditions; poverty in general, not just in medical care.

Our nation has constantly been improving under our present system. We are still leaders in medical research and development. Britain has a higher draft rejection rate than we do, proving that that nation's general health has not been improved by government control and that our nation's state of health is not extremely crucial. Our death rate decreased 60 per cent from 1900 to 1940. Our death rate and worker absence rate has been lower than those of countries with state medicine. In any one year, only half of our population will be ill, and then only 2 per cent at a time. A high per cent of illnesses do not even require a physician's care. The Committee on the Costs of Medical Care found that approximately 10 per cent of sick people neither requested nor received medical care during one year. Therefore, the statistics on the numbers of sick who do not have medical care prove nothing, for many of them are in high income brackets and just do not call a doctor. It is not true that people call a doctor sooner under the public system, for under the San Francisco municipal employee system, more serious surgical cases were postponed than ever before.

Our present facilities are adequate. Our medical servants are no more badly distributed than teachers, and certainly no

more so than they are in countries where medicine is under government control. Many country dwellers go to the city for treatment, anyhow; therefore, scarcity of doctors in rural areas is not alarming. Almost 98 per cent of our population is within 30 miles of a hospital—care can be obtained without a great deal of effort.

The sliding scale is a fair and efficient method of payment. The majority of doctors are primarily concerned with healing, secondarily with making profits. They are ordinarily just and able to judge a patient's financial condition fairly well. Big fees for operations are exceptions, occurring mainly in large cities. Fee-splitting is not so widely spread as we are led to believe. Not so much money goes for specialists, either. More than 80 per cent of medical conditions can be treated by the ordinary doctor with his own equipment. The American Medical Association has found that the number of specialists just about matches the need for them.

Even the poorest family will scrimp and save for a television set or a new car. No wonder middle and lower class homes are struck hard by sudden hospital expenses! Also, lack of proper dental care is to a great extent due to fear of dentists!

State medicine would give poorer, rather than improved, medical care. Universal examinations in countries having state medicine have not always proved thorough enough to detect illness. Preventable diseases have increased in Great Britain. The British have shown that they dislike the quality of service, for some have failed even to register for a doctor under the governmental plan. They prefer to hire a private physician rather than make use of the free care.

British doctors object to the extension of health service. They are beginning to cut down research and graduate study as a result of the system. In Germany employees are outnumbering the doctors—the people are turning to quacks. Russian hospitals and clinics are filthy and poorly managed. In New Zealand patients are mistreated by doctors to raise their own fees. Our Army and Navy doctors do not recommend widespread use of their public plan of medical care, and the health of the Army and

Navy in general is no better than that of the entire country. Many local public health centers do not give a very good impression of what state medicine would be; they are often dirty and badly run.

Government doctors are going to want to work only eight hours a day. Who is going to take the place of those who have been working from 12 to 18 hours a day? Also, much of someone's time will have to be spent filling out government records.

Without a fee for each service, there is no means by which those with imaginary ills can be kept from abusing the plan; malingering would waste the doctor's very valuable time. The dental service, also, would be crowded with many more patients than it could care for.

If patients did get a choice of their doctor in the plan, they would all want the best doctors, and either a few doctors would be overcrowded or the patients would be dissatisfied. Probably only the unsuccessful doctors would join the plan, anyhow. Also, in other countries doctors are poorly paid under the new system.

In foreign countries federal expenditures have increased greatly since the system was begun. Our army care costs are much higher than those for private care. This means taxes for supporting the system would be increasing as the years went on. Advocates of government control claim that citizens may use private medicine if they wish; but who could afford to pay the medical tax and pay a private doctor, too?

A Suitable Substitute

Voluntary health insurance is a suitable substitute for the proposed system, for the rich can pay for their care, the poor can still get it free, and the middle class can manage the insurance payments easily. The Blue Cross plans have also had tremendous success in lessening financial troubles over sudden hospital expenditures.

The point most scorned by the opposition but really the most important is that of maintaining the individuality of the doctor. A doctor spends many years studying for his profession so that he may be able to be of unmistakable value to mankind. Is this prized and honored ability to be changed into just another job, a daily drudgery, without the joy of personal contact with

patients as friends? Doctors do not want socialized medicine. Will it be forced upon them by meddling outsiders?

References

1. Complete Handbook on State Medicine. Portland, Maine, Walch, 1946. 164 p.
2. Free Medical Care. Jacksonville, Illinois, Mid-West Debate Bureau. (no date) 39 p.
3. Pickard, K., Rothenberg, R., Rothenberg, J.: Group Medicine—Health Insurance in Action. New York, Crown, 1949. p. 263-279.
4. Serbein, O. N.: Paying for Medical Care in the United States. New York, Columbia University Press, 1953. 392 p.

BULLETIN BOARD

COMING MEETINGS

Raleigh Academy of Medicine, Symposium on Obesity and Atherosclerosis—Sir Walter Hotel, Raleigh, October 24.

Southeastern Allergy Association, Annual Meeting—Fort Sumter, Charleston, South Carolina, November 1-2.

Eighth Annual County Medical Societies Civil Defense Conference—Morrison Hotel, Chicago, November 9-10.

Twenty-ninth Annual McGuire Lecture Series—Medical College of Virginia, Richmond, November 13-15.

A.M.A. Eleventh Annual Clinical Meeting—Convention Hall, Philadelphia, December 3-6.

American College of Surgeons, Sectional Meeting—Jackson, Mississippi, January 16-18.

Fifty-fourth Annual Congress on Medical Education and Licensure—The Palmer House, Chicago, February 9-11.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST COLLEGE

Dr. L. Emmett Holt, Jr., professor of pediatrics at New York University, opened the 1957-1958 series of lectures before the Bowman Gray Medical Society on September 30.

He was followed on October 7 by Dr. Richard L. Masland, a former member of the Bowman Gray School of Medicine faculty who is now assistant director of the National Institute of Neurological Diseases and Blindness. Dr. Masland spoke on "Research Relative to the Cause of Mental Retardation."

On October 14, a "Research Reports" program was sponsored by the Sigma Xi Club.

Dr. Charles M. Norfleet, Jr., chairman of the disaster committee, served as moderator at the October 21 disaster symposium.

On October 25, the faculty of the School of Medicine presented a symposium on atherosclerosis. The symposium was planned under the chairmanship of Dr. Norman M. Sulkin, professor of anatomy, and included discussions on "Pathologic Anatomy of Atherosclerosis," "Pathologic Physiology of Atherosclerosis," "Biochemical and Nutritional Aspects of Atherosclerosis," "Atherosclerotic Heart Disease," "Cerebral Atherosclerosis," "Surgical Aspects of Atherosclerosis," and "General Management of Atherosclerosis." The symposium is planned as the scientific program for the medical Alumni of Wake Forest College and of the Bowman Gray School of Medicine, who will hold their annual meeting on October 25 and 26.

On October 6-9 Dr. Richard C. Proctor, assistant professor of psychiatry and neurology, attended the meeting of the Southern Psychiatric Association in Miami Beach, where he presented a paper entitled "Evaluation of Research in Tranquillizing Drugs" and was a discussant of the paper, "Psychophysiological Indices of Pathology," by Dr. William Reese, head of the Department of Psychiatry at the University of Arkansas.

On October 9, Mr. Frank W. DeFriece, President of the S. E. Massengill Company of Bristol, Tennessee, spoke to the student body and the faculty of the Bowman Gray School of Medicine on "Pharmaceuticals and Their Preparation," and Mrs. DeFriece presented a travel talk on the Holy Land before the Wingate M. Johnson Student Medical Society. Mr. DeFriece is an attorney by profession, but has been associated with the S. E. Massengill Company since 1933, and president since 1946.

Dr. Eben Alexander, Jr., professor of neurosurgery, and Dr. Courtland H. Davis, Jr., assistant professor of neurosurgery, attended the meeting of the American College of Surgeons in Atlantic City on October 16-20. In the postgraduate course given at the Clinical Congress under the general title of "Immediate Treatment of Multiple Injuries," Dr. Alexander spoke on "Head injuries."

On October 28, Dr. Nathan Shock, Chief of Gerontology Branch of the Baltimore City Hospital, will speak before the Bowman Gray Medical Society.

At a recent meeting of the Board of Trustees of Wake Forest College, faculty appointments approved include:

Dr. A. Robert Cordell, instructor in surgery; Dr. Carolyn C. Huntley, instructor in pediatrics; Dr. Sara C. McClure, instructor in pathology; Dr. Charles W. Witcher, instructor in anesthesiology; Dr. Delmar E. Bland, Dr. Ben F. Huntley, Dr. John

H. Nicholson, Dr. William Cunningham Sugg, all to the position of assistant in clinical internal medicine; Dr. June A. Foley, assistant in preventive medicine; Dr. W. Joseph May, assistant in clinical obstetrics and gynecology; and Mrs. Phyllis Draper Newport, instructor in medical technology.

Dr. Leroy Barden Lamm was also appointed and has assumed his duties as instructor in psychiatry and clinical director of Graylyn. Dr. Lamm, a graduate of Duke University and The Bowman Gray School of Medicine of Wake Forest College, has been on the staff of the Veterans Hospital in North Little Rock, Arkansas, since 1952. He is certified by the American Board of Psychiatry, is a charter member of the Arkansas Psychiatric Society, and holds membership in the Southern Psychiatric Society, as well as the American Psychiatric Association.

Also appointed was Dr. Charles Lewis Spurr. Dr. Spurr has assumed his position of professor of internal medicine (hematology) after having been associated with Baylor University College of Medicine since 1949. He completed his premedical education at Bucknell University, and earned the Master of Science degree in physiology at the University of Chicago in 1938 and the Doctor of Medicine degree in 1940. Following intern and residency training at the University of Chicago, he accepted a position in the department of medicine there as instructor in 1943, followed by an assistant professorship in 1946. During the year 1948-49, he served as director of the clinics and chief of the medical service at the M. D. Anderson Hospital for Cancer Research. In 1949 he accepted an appointment as chief of the general medical research laboratories of the Veterans Administration Hospital in Houston, which position he held until coming to Winston-Salem.

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Dr. Martin G. Netsky, who has been on the faculty since 1955, has been named professor of neurology and director of the section of neurology. In this position he will continue his research and teaching in neurology and neuropathology and will supervise the educational program in neurology for medical students and the resident staff. Also in the Department of Psychiatry and Neurology, Dr. Angus C. Randolph has been made director of the department. He served as interim director during the year 1956-1957.

Other promotions include Dr. Hugh H. Lofland to assistant professor of biochemistry, and Dr. C. Glenn Sawyer, associate professor of internal medicine.

NEWS NOTES FROM THE DUKE UNIVERSITY SCHOOL OF MEDICINE

Finding a chemical solution which can be injected safely into diseased coronary arteries to make them visible in x-ray photographs is the object of research now under way by a team of doctors at the Duke University Medical Center.

Financed by a \$36,500 grant from the National Heart Institute of the U. S. Public Health Service, the project is aimed at making possible more effective treatment of heart disease victims.

Working on the project with Dr. William G. Anlyan, chief investigator, are Drs. James V. Warren, professor of medicine; George Margolis, professor of pathology; George J. Baylin, professor radiology; George Richards instructor in radiology; and Robert Trumbo, instructor in surgery.

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An aircraft pilot's emotional state has now been shown to have a direct bearing on his resistance to blackouts, Dr. Albert J. Silverman, Duke psychiatrist, stated in a report presented at the European Congress of Aviation Medicine held in Stockholm Sweden last month.

Dr. Silverman is director of the Psychophysiological Laboratory in the Department of Psychiatry. The research report was prepared by Dr. Silverman and Dr. Sanford I. Cohen, associate director of the Duke laboratory.

Dr. Silverman served as chief of the Stress and Fatigue Section of the Gero Medical Laboratory at Wright-Patterson Air Force Base during a recent tour of duty in the Air Force. The Duke Psychophysiology Laboratory is concerned with study of the stresses of living.

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Two appointments have been made in the Department of Dietetics at Duke Medical Center. Miss Esther Ratliff has been named director and associate professor of dietetics, and Miss Helen McLachlan has been appointed assistant director of dietetics, in charge of educational activities in that area.

This fall, Miss Ratliff and her staff will put into operation a number of innovations and improvements in food service made possible by facilities in the new addition to Duke Hospital. These will include a conveyor system to provide rapid service of hot and cold foods to patients plus an ambulatory dining room for patients who are not confined to bed and who prefer not to eat in their rooms. The new services are tentatively scheduled to begin around November 1.

* * *

A new graduate program in physical therapy, to be offered at the Duke University Medical Center, has been announced by Dean Marcus E. Hobbs of the Duke Graduate School of Arts and Sciences.

Miss Helen Kaiser, director of the Medical Center's Division of Physical Therapy, said the program, which is the first of its kind in the United

States to be based on post-baccalaureate work, has been initiated to help physical therapists meet the demands created by the increased scope of their profession.

Students in the program may qualify for the M.A. degree in anatomy or physiology by following up the basic 15-month physical therapy course with a semester and a summer session of graduate study, she said.

The new program is open to men and women who meet the entrance requirements of both the Duke Graduate School of Arts and Sciences and the Division of Physical Therapy. Among these requirements, according to Dean Hobbs, are: a bachelor's degree from an accredited college or university, a well rounded undergraduate preparation for advanced level work, and acceptable health character, and personal qualifications.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

North Carolina Memorial Hospital, the teaching hospital of the University of North Carolina School, observed the fifth anniversary of its opening on Labor Day, Monday, September 2.

The hospital was opened to receive patients on September 2, 1952. At that time, a staff of 215 was on hand to receive the first patient—Mrs. John F. Bolton, a housewife from West End.

On the day the hospital opened, 78 beds were available for patient care. Today the hospital has a capacity for 350 patients, and the staff has grown from 215 to 683.

A total of 171 students of the UNC School of Nursing have been trained here. The graduates of this school are now holding positions in the nursing profession throughout North Carolina.

Two hundred and four doctors have received their intern training or resident training at Memorial Hospital. At present, 110 physicians are participating in these two programs.

Since the hospital opened its doors five years ago, 61,000 patients have been admitted. These are individual patients.

A total of 291,000 visits have been made to the outpatient clinics of the hospital. In this five year period, the hospital has provided 436,000 days of patient care. Some 3,500 babies have been born at the hospital since 1953.

The Department of Obstetrics and Gynecology and a Special Care Unit began operating in 1953. Acutely ill patients are admitted to the Special Care Unit when they need more than average personalized care.

The Psychiatric Center was opened in 1954 and at the present time is being enlarged by the construction of a new wing. The Speech and Hearing Clinic also began operating in 1954.

Last year a premature nursery was opened with a staff of nurses specially trained in this type of in-

fant care. This nursery has accommodations for 15 babies. In addition to infants born prematurely, this unit cares for full term infants requiring special care or surgery because of defects.

Among other special units in the hospital are the Seizure Clinic for the treatment of epileptics, the Rheumatic Fever Clinic and the Department of Physical Therapy. A four-year course in physical therapy began at UNC this fall.

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Postgraduate medical courses, co-sponsored by the UNC School of Medicine and Extension Division, and the Burke and Buncombe County Medical Societies, are in progress in Morganton and Asheville.

First night attendance records in both locations were broken when the courses began on September 18 and 19. Dr. Leonard Palumbo, associate professor of Obstetrics and Gynecology at the UNC School of Medicine was the speaker at both locations for the opening sessions.

The courses will continue during October and November with these speakers and subjects:

October 24 (Asheville): Dr. Erle W. Peacock, Jr., Instructor in Surgery, UNC School of Medicine—"Some Problems in Wound Care" and Restorative Hand Surgery."

October 30 and 31: Dr. W. M. Kelsey, Professor and Director, Department of Pediatrics, Bowman Gray School of Medicine—"Medical Emergencies in Children" and "Feeding Problems in Children."

November 6 and 7: Dr. Benjamin Manchester, Assistant Clinical Professor of Medicine, George Washington University School of Medicine—"The Prevention of Subsequent Coronary Thrombosis" and "The Value of Anticoagulants in Cardiovascular Disorders."

* * *

The appointment of Dr. Eugene W. Loeser, Jr., as assistant professor in the Department of Medicine has been announced by UNC Chancellor William B. Aycock.

Dr. Loeser, a native of Buffalo, New York, received his M.D. degree from the University of Buffalo in 1952. Last year he was an assistant in neurology at Columbia University.

* * *

A group of 16 British physicians, all distinguished in the field of obstetrics and gynecology, visited the Department of Obstetrics and Gynecology on September 10.

The group lunched with the faculty members of the UNC Department of Obstetrics and Gynecology. This was followed by a professional session in which a number of papers and cases were presented by department members of the UNC school.

Taking part in this session were Dr. Leonard Palumbo, Dr. Deborah Leary, Dr. James Donnelly and Dr. Charles Flowers, all of the Department of Obstetrics and Gynecology.

* * *

The North Carolina Occupational Therapy Association recently held an organizational meeting at Memorial Hospital. This meeting was attended by 22 registered occupational therapists and associates from institutions throughout North Carolina.

Among officers elected for the Association are Miss Christine Burton and Miss Jutta Hinnom of the N. C. Memorial Hospital. Miss Burton will serve as chairman of the public relations committee and Miss Hinnom as alternate delegate to the annual conference of the American Occupational Therapy Association meeting in Cleveland from October 20 through 25.

A total of 66 first year medical students have been accepted by the University of North Carolina School of Medicine.

Of the total, all are men except one. This is Mrs. Erolyn Jenkins Blount of Nashville. There are two out of state students among the first year students. The remaining 63 students come from throughout the state of North Carolina.

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Dr. W. P. Richardson, Assistant Dean for Continuation Education has announced plans for the School of Medicine Symposium to be held on November 21 and 22 in Chapel Hill. The complete program will be mailed to all doctors in the Carolinas and Virginia during October.

NORTH CAROLINA ALCOHOLIC REHABILITATION PROGRAM

For the benefit of physicians who lack full details, the following explains admission procedures for alcoholic patients entering the Alcoholic Rehabilitation Center, Butner, North Carolina. We remind you that the Center accepts white male and female patients. The census on female patients has been comparably low.

Here are the admission steps:

1. Write a letter to the Superintendent, ARC, Butner, North Carolina, requesting appointment for admission. Letter may be written by patient's physician, a member of his family, a friend, or by the patient himself; but should express the patient's voluntary desire for treatment. Ordinarily, admission can be arranged within two or three days after application.

2. Physician should prepare a written statement of patient's general physical condition, noting particularly any chronic diseases or conditions (other than alcoholism). All prospective patients are expected to be sober and their physical condition sufficiently good to allow full participation in the routine of the Center, including recreation, assigned housekeeping duties, and so forth. The Treatment Center is not adequately staffed to treat serious physical illnesses.

3. Patient's complete social history must be compiled by trained worker in local Welfare Department or Family Service Society. History may be

given by the alcoholic's wife, husband, or nearest relative—patient does not have to be present. It is not necessary that social history precede or accompany patient to Center, but may be mailed in a few days after his admission.

4. A fee of \$75 in cash or certified check must be paid upon admission.

5. Patient will sign, on admission, a letter-statement affirming his voluntary desire for treatment.

For all information about the NCARP Treatment Center write: The Superintendent, ARC, Butner, North Carolina. For other information concerning the North Carolina Alcoholic Rehabilitation Program write: S. K. Proctor, 15 West Jones Street, Raleigh.

NORTH CAROLINA SURGICAL ASSOCIATION

The North Carolina Surgical Association held its fall meeting at the Ocean Forest Hotel, Myrtle Beach, South Carolina, on September 12, 13 and 14, 1957.

The program consisted of papers by Dr. Isaac E. Harris, Jr. on "Hemorrhoids," by Dr. Gordon Sinclair on "Fissure in Ano and Pruritus," by Dr. John B. Anderson on "Fistulae in Ano," by Dr. William Farmer on "Pilonidal Cysts," by Dr. Addison Brenizer on "Strictures and Incontinence," by Dr. William Hollister on "Cardiac Arrest," by Dr. Richard Taliaferro on "Apnea," and brief discussions by Dr. John B. Anderson, Dr. William R. Pitts and Dr. Theodore S. Raiford on "Little Things Learned in Practice."

CHARLOTTE REHABILITATION AND SPASTICS HOSPITAL

The Charlotte Rehabilitation and Spastics Hospital was dedicated with appropriate exercises held in Charlotte on September 6. Dr. Howard A. Rusk, director of the Institute of Physical Medicine and Rehabilitation, New York University—Bellevue Medical Center, New York, gave the dedicatory address. Officiating in the laying of the corner stone were Col. Charles H. Warren, director of Vocational Rehabilitation, Raleigh; James S. Smith, mayor of the City of Charlotte, and S. Y. McAden, chairman of the Mecklenburg County Board of Commissioners. Dr. Rusk was introduced by Dr. Watson Rankin of the Duke Endowment.

Open house was held for physicians and their wives on the evening of September 6 and for the general public on September 7.

TWENTY-NINTH ANNUAL MCGUIRE LECTURE SERIES

The twenty-ninth annual McGuire Lecture Series and a symposium on Endocrinology and Metabolism in Surgery will be given at the Medical College of Virginia in Richmond, November 13, 14, and 15.

The evening lectures will be given by Dr. Francis D. Moore, Mosely Professor of Surgery, Harvard Medical School. On Wednesday, November 13, he will speak on "Electrolyte Disorders Characteristic

EMORY UNIVERSITY SCHOOL OF MEDICINE

Atlanta, Georgia

Announces

SIX DAYS of CARDIOLOGY

(January 13-18, 1958)

Major Problems of Heart Disease
will be discussed by

Members of the Emory University Faculty
and the following visitors:

- A. Corlton Ernstene, M.D.,**
Chairman, Division of Medicine,
Cleveland Clinic, Cleveland, Ohio
- Dwight Harken, M.D.,**
Assistant Clinical Professor of
Surgery, Harvard Medical School;
Surgeon, Peter Bent Brigham Hospital;
Chief of Department of Thoracic Surgery,
Mount Auburn and Malden Hospitals,
Boston, Massachusetts
- Helen B. Taussig, M.D.**
Associate Professor of Pediatrics,
The Johns Hopkins University
School of Medicine; Director of
the Children's Heart Clinic of
the Harriet Lane Home, The Johns
Hopkins Hospital, Baltimore, Md.
- Eugene A. Stead, M.D.,**
Professor and Chairman, Depart-
ment of Medicine, Duke University
School of Medicine, Durham, N. C.
- Ansel B. Keys, M.D.,**
Professor of Medicine, University
of Minnesota; Director of the Lab-
oratory of Physiological Hygiene,
University of Minnesota School of
Public Health, Minneapolis, Minn.
- Edward S. Orgain, M.D.,**
Professor of Medicine, Duke Univ-
ersity School of Medicine; Director,
Cardiovascular Disease Service, Duke
Hospital, Durham, North Carolina
- E. Grey Dimond, M.D.,**
Professor and Chairman of the
Department of Medicine; Director
of the Cardiovascular Laboratory,
University of Kansas Medical
Center, Kansas City, Kansas.
- Gene H. Stollerman, M.D.,**
Associate Professor of Medicine,
Northwestern University, Chicago,
Illinois.

Tuition fee: \$100.00

Write: Postgraduate Teaching Program,
Emory University School of Medi-
cine, 69 Butler Street, Atlanta 3,
Georgia

of the Surgical Patient," and on Thursday, Novem-
ber 14 on "Protein Starvation and the Wound." Dr.
Moore will also participate in the symposium on
November 14.

All lectures will be held in Baruch Auditorium of
the Egyptian Building at the Medical College. There
is no charge for the McGuire Lectures themselves;
there will be a charge of \$5.00 a day for lectures
given during the days of November 14 and 15, ex-
cept to members of the faculty of the Medical Col-
lege of Virginia, the Medical Department of the
University of Virginia, the physicians of the Mc-
Guire Veterans Hospital, medical students, and
members of the house staff of any hospital.

AMERICAN MEDICAL WRITERS' ASSOCIATION

Dr. Richard B. Cattell (B.A., M.D., D.Sc., F.A.C.S.)
of Boston, internationally known surgeon, has been
honored as recipient of the 1957 Honor Award given
by the American Medical Writers' Association. Dr.
Cattell, one of America's most distinguished sur-
geons, is Director of the Lahey Clinic and Surgeon-
in-Chief of the New England Baptist Hospital of
Boston.

Dr. Austin Smith, of Chicago, internationally
known medical editor, has been honored as recipient
of the 1957 Distinguished Service Award given by
the American Medical Writers' Association. Dr.
Smith, formerly Secretary of the Council on Phar-
macy and Chemistry of the American Medical As-
sociation, has served for a number of years as editor
of *The Journal of the American Medical Association*.
The Distinguished Service Award is given annually
to a fellow of the association "who has made dis-
tinguished contributions to medical literature or
rendered unusual and distinguished service to the
medical profession."

MISSISSIPPI VALLEY MEDICAL SOCIETY

Dr. Russell L. Cecil, of New York, internationally
known internist and medical editor, has been hon-
ored as recipient of the 1957 Honor Award given by
the Mississippi Valley Medical Society. Dr. Cecil,
one of America's best known internists, is emeritus
professor of medicine, Cornell University College
of Medicine, and editor of "A Textbook of Medicine."

Dr. Frank R. Peterson of Cedar Rapids, Iowa,
nationally known surgeon and medical educator, has
been honored as recipient of the 1957 Distinguished
Service Award given by the Mississippi Valley
Medical Society. Dr. Peterson is past president of
the Mississippi Valley Medical Society, was former-
ly professor and head of the Department of Surgery,
State University of Iowa College of Medicine, and
is president of the Iowa State Board of Examiners.

The awards, comprising plaques and gold medals,
were presented to Dr. Cecil and Dr. Peterson by the
president of the society, Dr. George Kirby. They
were given at the banquet held on the occasion of
the twenty-second annual meeting of the society.

NEWS NOTES FROM THE AMERICAN MEDICAL ASSOCIATION

A.M.A. Plans Civil Defense Meeting

The eighth annual County Medical Societies Civil Defense Conference will be held November 9-10 at Chicago's Morrison hotel. Sponsored by the A.M.A. Council on National Defense, the Conference is designed to help local medical and health personnel plan their roles in disaster and civil defense emergencies. Congresswoman Martha W. Griffiths of Michigan will report on the status of national civil defense legislation which received considerable attention during the first session of the eighty-fifth congress. Mrs. Griffiths is a member of the House Committee on Government Operations and its Subcommittee on Military Operations.

Another highlight of the Conference will be reports on the experience gained through several test operational exercises conducted under simulated disaster conditions, including a critique of the national exercise "Operation Alert."

Additional reports will be given on such subjects as general preparedness planning, hospital operational preparedness, the role of the county medical society, radiologic aspects of radiation fallout, the AMA-FCDA study project, the A.M.A. program on Asian influenza. The group also will break up into small sections to discuss specific problems.

Medical Education Congress Set For February 9-11

Problems confronting medical education in the rapidly changing scene will be the main topic of concern at the fifty-fourth annual Congress on Medical Education and Licensure February 9-11. Sponsored by the A.M.A. Council on Medical Education and Hospitals, the Federation of State Medical Boards of the United States, and the Advisory Board for Medical Specialties, the Congress will be held at the Palmer House, Chicago. The conferees will view medical education's broad potential in the light of four factors—the changing characteristics of the nation's population, sociological trends, economy and medical knowledge—and the implications of these factors on medical education, medical research and medical care.

In addition, four workshop committees—composed of representatives from the A.M.A., the Council, the AAMC, higher education, government, business, insurance, labor and agriculture—will discuss various problem areas, endeavor to clarify questions that need to be raised and recommend possible ways that medicine can assume the leadership in solving these problems. The committees' reports will be presented before the entire Congress for discussion from the floor.

On Monday morning, February 10, the Council will conduct its annual co-sponsored meeting with the Advisory Board. This session will be devoted principally to discussions of problems in graduate medical education created by the changing status

of the patient and the role of the community hospital in graduate medical education. The Federation will hold its second examination institute on Saturday, February 8, and its regular meeting on Tuesday, February 11.

A.M.A. Sets Up Research Foundation

The American Medical Research Foundation recently was established by the A.M.A. Principal purposes of the Foundation will be (1) to promote the betterment of public health through scientific and medical research; (2) to plan and initiate scientific and medical research, and (3) to collect, correlate, evaluate and disseminate results of scientific and medical research activities to the general public. Voting members of the Foundation will be A.M.A. trustees. Meetings will be held annually at the time of the A.M.A. Annual Sessions.

Arrange Cancer Film Bookings Through A.M.A.

Hope in the thought that 75,000 lives in America need not be lost needlessly to cancer each year is the theme of a dramatic educational film recently added to the A.M.A. Film Library. Titled "The Other City," the film stresses the encouraging fact that doctors currently are saving one in three patients as compared with a previous one-in-four ratio.

Produced by the American Cancer Society, the 16mm color film runs 22 minutes and 30 seconds. It is suitable for showings on local television as well as for church, club and school gatherings. Medical societies may book the film through the A.M.A. Film Library.

A.M.A. To Co-Sponsor Symposium At A.A.A.S. Meeting

A program on normal and abnormal aspects of the skin will be sponsored jointly by the A.M.A.'s Committee on Cosmetics and the Society for Investigative Dermatology December 28-29 during the hundred twenty-fourth annual meeting of the American Association for the Advancement of Science in Indianapolis. The two-day symposium entitled "The Human Integument—Normal and Abnormal" will be presented before the medical sciences section of the A.A.A.S.

Further details may be obtained by writing directly to the Committee on Cosmetics.

AMERICAN CANCER SOCIETY

"Cancer of the Head and Neck" will be the subject of a scientific session for physicians and dentists to be held at 2:00 p.m., October 20, at the Sir Walter Hotel, Raleigh.

The program is a feature of the annual meeting of the American Cancer Society, North Carolina Division, and is sponsored by the Medical and Scientific and Professional Education committees of the Society in conjunction with the cancer committees of the State Medical and Dental Societies.

UNIVERSITY OF ILLINOIS

The Medical Alumni Association of the University of Illinois announces sponsorship of a Fall Medical Refresher, to be held on Saturday, November 23, on the University's professional colleges campus in Chicago. Announcement of the event was made recently by Dr. John P. O'Neil, president of the Medical Alumni Association.

The day-long affair, first of its kind at the College of Medicine, will consist of panels and open symposiums on current medical problems, moderated by key faculty members. Tours of the hospitals and Medical College with a social hour and dinner at the Illini Union Building are also part of the many activities planned.

AMERICAN RHEUMATISM ASSOCIATION

The American Rheumatism Association is pleased to announce the forthcoming publication of a new medical journal—*Arthritis and Rheumatism: The Official Journal of the American Rheumatism Association*. Grune & Stratton, Inc., New York, publishers of the journals *Blood*, *Circulation*, *Circulation Research*, *Clinical Research Proceedings*, and *Metabolism*, have been chosen by the Association to publish this new journal, which will appear bimonthly starting with the January-February issue of 1958. The Association's Publication Committee is composed of Drs. Richard H. Freyberg, William H. Kammerer, John Lansbury, Charles Ragan, and Charles L. Short. Dr. William S. Clark has been asked to serve as editor, and the remainder of the editorial board will be announced subsequently.

The Journal will cover the field of connective tissue disorders, in particular rheumatoid arthritis, osteoarthritis, rheumatic fever, gout, the so-called "collagen diseases," and nonarticular rheumatism.

INTERNATIONAL COLLEGE OF SURGEONS

Dr. Max Thorek, Chicago surgeon and founder of the International College of Surgeons, has been honored by the French Government with the award of Commander of the Legion of Honor for his important contributions to surgery and his outstanding work in the formation and growth of the College, "creating a better understanding and scientific cooperation among surgeons of the world."

Dr. Thorek serves as Secretary-General of the College and as editor of its official journal and other publications. He also is president and chief surgeon of the American Hospital, which he founded.

AMERICAN HEARING SOCIETY

Hard of hearing children and adults across the country will benefit from the American Hearing Society's current survey of services offered by its member organizations, the agency's executive director, Crayton Walker, announced.

Standards established by the society are aimed at improving and expanding local hearing programs,

and securing additional chapters, as well as raising the standards of national services to the hearing handicapped.

Special effort will be made to improve the hearing aid evaluation and consultation services, which are an important part of the program in many local hearing societies. In this connection Mr. Walker said, "Over 80 per cent of the new cases seen by our member agencies come seeking some type of hearing aid consultation."

"Because of the growing demand for guidance in selection and use of a hearing aid, we are encouraging all our member agencies to include such service, and to work more closely with hearing aid dealers in the respective communities," he stated.

On its national roster the American Hearing Society now carries 43 member agencies with professional staff, and 53 affiliates having volunteer workers only. Many of the member agencies, located in metropolitan areas, are included in United Funds of Community Chests.

HEALTH INSURANCE ASSOCIATION OF AMERICA

The recently adopted Code of Ethical Standards of the Health Insurance Association of America, has just been produced in leaflet form and is being distributed to the Association membership, it was announced recently.

The Code, unanimously approved by the Health Insurance Association of America at its annual meeting last May in Washington, D. C., lists nine specific points governing the sale, administration and advertising of voluntary health insurance, and has become a strict condition of membership in the Association. Additional copies may be obtained from the Health Insurance Association of America, 208 S. LaSalle St., Chicago, 4, Illinois.

The Health Insurance Association of America is a trade association of 261 companies in the United States and Canada, representing more than 80 per cent of the voluntary health insurance in force through insurance companies. There are more than 66 million persons in the country today covered by insurance company policies designed to help pay doctor and hospital bills.

AMERICAN COLLEGE OF SURGEONS

All members of the medical profession are invited to attend a three-day sectional meeting of the American College of Surgeons in Jackson, Mississippi, January 16 through 18, at the Hotel Heidelberg.

Dr. J. Harvey Johnston, Jr., clinical assistant professor of surgery, University of Mississippi School of Medicine, is chairman of the local advisory committee on arrangements.

Topics will include Complications of Abdominal Surgery, Chemotherapy, Metastasis and Limitations of Surgery for Cancer, Common Errors in Management of Fractures, Pediatric Surgery, Management

of Multiple Injuries, New Horizons in Cardiac and Lung Surgery, Nutrition Therapy and Transfusions. Medical motion pictures will be shown each day.

An innovation at this year's Sectional Meetings is the fellowship luncheon, featuring a panel discussion on college activities, with a question period. The president of the College, Dr. William L. Estes, Jr., will preside.

WORLD OF MEDICINE

New Educational Television Approach Unveiled

A new approach in educational television was unveiled recently at the premiere showing of a series of 13 medical programs produced under a public service grant from Schering Corporation, pharmaceutical manufacturer. The series, entitled "World of Medicine," is the first to stem from a newly developed plan whereby private industry is invited to endow nationally distributed educational TV programs.

The premiere was held in New York by the recently formed Organization for National Support of Educational Television (ONSET).

The series will be telecast over some 30 other educational television stations throughout the nation.

The "patron" approach will provide educational TV with the means to produce quality programs on a national scale without the controls of commercial sponsorship, but with the support of business firms as "patrons." Unlike "sponsors" on commercial TV stations, ONSET patrons are accepted only by invitation and exercise no influence over program content. Heretofore, with the exception of those commissioned by the Educational Television and Radio Center of Ann Arbor, Michigan, ETV programs has been almost entirely local, and have been supported by funds from civic, school and philanthropic groups and individuals.

The half-hour "World of Medicine" programs were produced by Sherman Dryer, with the cooperation of numerous professional societies, universities and colleges, and individual physicians and research scientists. The series was produced by kinescope recording with no actors, no scripts and no dramatized sequences. Nurses and physicians, outstanding authorities in various fields of medicine were assembled in the Chicago ETV studios of WTTW where they created their "roles."

After the initial showing of the 13 programs, the kinescopes will be made available by Schering Corporation to medical and lay educational and civic groups.

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

The Public Health Service has announced a new program of financial support for advanced training of research scientists in the field of neurological and sensory disorders.

The new program, designed to help research scientists obtain additional specialized training for careers in teaching or research, will be conducted by the National Institute of Neurological Diseases and Blindness, of the Service's National Institutes of Health, Bethesda, Maryland.

A previous program, under which about 75 scientists received advanced training during the last fiscal year, was concerned exclusively with clinical training. The current program is designed to encourage advanced training in either the clinical area or in such basic science areas as neurochemistry, neuropharmacology, neurophysiology, or neuroanatomy.

Individual awards under the program generally will be made for not less than nine months and for not more than one year. All awards are subject to renewal, however, and may be continued for a period of three years. Stipends are determined individually in accordance with each applicant's qualifications and training needs. Such stipends may range from \$5,500 to \$14,800 a year.

Application forms and instructions may be obtained by writing to the Chief, Extramural Programs Branch, National Institute of Neurological Diseases and Blindness, National Institutes of Health, Bethesda 14, Maryland. Completed applications should be submitted to the same address.

The Public Health Service today has released a new illustrated publication on disease of blood vessels of the brain, third ranking cause of death in the United States.

The booklet shows the five important ways in which vessel diseases impair the working of the brain and outlines steps involved in treatment and rehabilitation.

"Cerebral Vascular Disease and Strokes" is Public Health Service Publication Number 513. A free copy may be obtained from the Heart Information Center, National Heart Institute, Bethesda 14, Maryland.

* * *

The August 1957 issue of the *Journal of the National Cancer Institute* commemorates the twentieth anniversary of the Institute with a symposium of articles which review the development and accomplishments of cancer research and programs for cancer control.

The organization and growth of the Institute as a part of the National Institutes of Health of the Public Health Service, Department of Health, Education, and Welfare are described in an article entitled "The National Cancer Institute: A Twenty-Year Retrospect," by Dr. J. R. Heller, Director since 1948. The Institute's three former Directors, Dr. Carl Voegtlin (1938-1943), Dr. Roscoe R. Spencer (1943-1947) and Dr. Leonard A. Scheele (1947-1948) contributed anniversary messages to the issue.

Approximately 800 graduate nurses will receive advanced training this year in the second year of a

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Public Health Service program to help overcome a shortage of nurses qualified for teaching and administrative positions, the Service announced today.

Grants totaling \$3 million have been made to 60 schools of nursing and public health throughout the country. These institutions in turn will award traineeships to qualified nurses interested in teaching positions in schools of nursing, or in supervisory and administrative posts in hospital nursing services and public health agencies.

Last year, a total of 587 traineeships was made available to 56 institutions under a \$2 million appropriation. The law authorizing the program was passed in July, 1956.

The names of this year's participating institutions and the number of traineeships awarded each are shown on the attached list.

VETERANS ADMINISTRATION

Dr. Thomas L. Auth, since 1954 chief of the neurology service at the Veterans Administration hospital in Washington, D. C., has been appointed chief of the neurology division at VA central office in Washington.

He succeeds Dr. Benedict Nagler, who left VA September 8 to become superintendent of the Lynchburg Training School and Hospital at Colony, Virginia.

* * *

Dr. W. Edward Chamberlain, professor emeritus of radiology at Temple University Medical School and president of the American Roentgen Ray Society, will head the Veterans Administration atomic medicine program in Washington, D. C., VA announced recently.

He will serve as special assistant for atomic medicine to the VA Chief Medical Director, Dr. William S. Middleton, and as associate director of the VA research service.

* * *

A study to determine to what extent antibiotic drugs are losing their effectiveness against certain infections was announced by Veterans Administration recently.

Dr. Max Bovarnick of the Brooklyn VA hospital is chairman of the project.

Dr. Bovarnick said it has been widely observed in many parts of the world that an increasing number of microbes are developing resistance to the antibiotics, such as penicillin, so that the drugs are no longer useful against infections which the germs cause.

The VA study will begin with one of the most important groups of these antibiotic-resistant microbes, the staphylococci, some of which cause infections in wounds and following surgery.

VA plans to extend the study and its findings to other groups of microbes which become an increasingly serious problem as they develop drug resistance, the agency said.

The Month in Washington

In the last few years interest has built up in the problems of the older people—how they are to get their bills paid, how to spend their time constructively, what chronic medical conditions are causing them the most trouble. Innumerable national and local conferences have searched for ways to make life more satisfying and healthy for people entering old age, and committees are at work on the problem in thousands of communities.

In this favorable climate, when every device that might help the older citizens is being examined, there is being revived a scheme that met with no success at all when first proposed more than six years ago.

It is a plan for government-paid hospitalization under the Old Age and Survivors' Insurance system.

Here is the argument that is made for it:

People in old age generally have less income than when they were younger, but at the same time they require more medical attention and hospital care. Neither voluntary nor commercial health insurance has been able to offer these people the protection they need. The only solution, sponsors of the plan say, is to get the federal government into the picture.

Opponents of the idea agree that older people are sick more often and generally don't have much money, but they disagree violently with the other arguments. They point out that slowly but surely insurance coverage is being extended to older people at a price they can afford to pay. Most important, hospitalization-at-65 critics maintain that a system like this is in effect national compulsory health insurance under Social Security.

Early this year Reps. Emanuel Celler (D.N.Y.) and John Dingell (D.Mich.) introduced bills on this subject. They would allow 60 days a year free hospitalization for OASI-covered men 65 and over and women 62 and over. Rep. Kenneth A. Roberts (D.Ala.) offered a similar bill.

Just before the session ended two developments occurred that are evidence the proponents of this system of hospitalization are getting ready to make a real fight for it next year.

First, Rep. Aime J. Forand (D.R.I.) presented a bill that would make extensive liberalization in the social security program, including creation of a hospitalization that would give free surgical service to the aged program. Some national labor leaders immediately pledged their support to this bill, a not unexpected move as the AFL-CIO is officially behind the general idea.

Then Senator Richard L. Neuberger (D., Oregon) made it plain he, too, wanted the old people to have free in-hospital medical care. The senator said he hadn't firmed up his thoughts, but that he believed the best approach would be something like the Military Dependent Medical Care program (Medicare), making use of Blue Cross or other nonprofit groups. He estimates that a 1 per cent increase in payroll taxes for both employer and employee would meet the extra costs.

Mr. Forand, on the other hand, is specific. He would make all persons receiving OASI retirement benefits eligible and also surviving widows and children, but would not include persons receiving OASI disability payments. He would broaden the time period by allowing 120 days of hospital or nursing home care each year, with hospital stays limited to 60 days.

The Forand measure also has a provision, not contained in most earlier bills, for OASI also to pay for in-hospital surgical services certified as necessary by the physician.

Mr. Forand would take no chance of running out of money. He would levy social security payroll taxes on all income up to \$6,000 (present limit \$4,200), and also increase the tax rate a half per cent for employer and employee alike, and three-quarters of one per cent for the self-employed.

It is almost certain that these and other similar suggestions will receive serious consideration by Congress next year, with passage of a bill much more likely than in 1951 when President Truman and Oscar Ewing first proposed the idea.

Notes

When Congress returns January 7, one of the measures waiting its attention will be a bill to control union welfare funds through registration and publicity. (Most funds involve medical-hospital benefits).

Jenkins-Keogh legislation, for deferment of income taxes on money put into retirement plans by the self-employed, now is assured of a hearing next year when the House Ways and Means Committee goes into all phases of taxation.

* * *

The Atomic Energy Commission has made its 100,000th shipment of radioisotopes, many of them for medical use.

* * *

The National Heart Institute, Bethesda 14, Maryland, has a new booklet, written in popular language, on cerebral vascular diseases.

BOOK REVIEWS

Expectant Motherhood. By Nicholas J. Eastman, M.D. Ed. 3. 198 pages, Price, \$1.75, Boston: Little, Brown and Company, 1957.

Current popular interest in medicine has established the need for accurate and informative publications for lay reading. Such literature must be simple in style, and must avoid spectacular or gruesome medical and surgical details or handle them with extreme delicacy.

Unfortunately the lurid and frightening aspects of human reproduction (actually representing but a small segment of total obstetric practice) have too frequently been dilated and exploited by popular writers and have significantly contributed to the apprehension and fears of expectant mothers. Professor Eastman's classic handbook, now in its third edition, remarkably well fulfills the criteria noted, and serves as an extremely useful supplement to routine prenatal advice and counsel of the obstetric attendant. Prenatal phenomena, labor and delivery are discussed in conservative and general terms, the specific details of management being left to the obstetrician. The subjects of conception, fetal growth, hygiene of pregnancy, diet, and weight control are all nicely and adequately handled. A short but necessary and informative chapter on danger signals is included, but the text is phrased so as not actually to alarm the patient. "Natural childbirth" is discussed in sensible terms, and the phenomena of labor and normal delivery are reasonably and accurately described for the patient.

Although this book is by no means intended to be a "do it yourself" text of midwifery, it is highly recommended as a supplement to routine prenatal advice for the interested reader and is a strong focus of attack against what Dr. Eastman has termed "bridge table obstetrics."

In Memoriam

EDGAR HALL HAND, M.D.

September 17, 1880—June 1, 1957

In the loss by death of Dr. Edgar Hall Hand on June 1, 1957, the Mecklenburg County Medical Society and the citizens of Mecklenburg County lost a well known physician, a good friend, and a loyal public servant.

Dr. Hand was born on September 17, 1880, in the New Hope Community of Gaston County, son of the late Samuel Jasper and Catherine Lineberger Hand. He attended Lowell High School and Banks Academy at Rock Hill, South Carolina, and was graduated in pharmacy from the University of Maryland in 1902. After engaging in the practice of pharmacy for two years he studied medicine at the North Carolina Medical College of Davidson located at Charlotte. He received his degree in 1907.

Dr. Hand was a general practitioner in southern Mecklenburg County for 15 years, and drove a two-wheeled cart and later a buggy, to reach his patients over the back roads of rural Mecklenburg. He was appointed to the Board of Health of Mecklenburg County and served on that Board from 1922 to 1929. In 1929 he was elected Assistant County Health Officer, and in 1935 became County Health Officer. He served in that capacity from 1935 until his retirement due to ill health in 1953.

Dr. Hand was a member of the Mecklenburg County Medical Society and was to have received recognition of 50 years of membership on June 4. He was also a member of the North Carolina Public Health Association and the American Public Health Association. He took an active interest in all Health Agencies and was a member of the Board of the Mecklenburg Sanatorium and the Mecklenburg Chapter of the American Cancer Society.

Dr. Hand was an elder in the Pincville Presbyterian Church. He was a member of the Excelsior Lodge of the Masonic Order and of the Oasis Temple of the Shrine.

Dr. Hand was married on September 22, 1909, to the former Nannie Williamson of Mecklenburg County, who died in 1943. They had one son, Edgar Hall Hand, Jr., presently of Charlotte.

On December 20, 1944, Dr. Hand married the former Kate Nesbitt McArver, who survives him. He is also survived by one sister, Mrs. Lambert Stowe of Belmont, North Carolina.

Be it therefore resolved that a copy of this Memorial tribute be spread upon the minutes of the Mecklenburg County Medical Society, and a copy be forwarded to Mrs. Kate Nesbitt Hand, Mr. Edgar Hall Hand, and to the Medical Society of the State of North Carolina.

Respectfully submitted this 19th day of July 1957.

Thomas C. Bost, M.D.

Elizabeth C. Corkey, M.D.

NORTH CAROLINA

Medical Journal



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November, 1957

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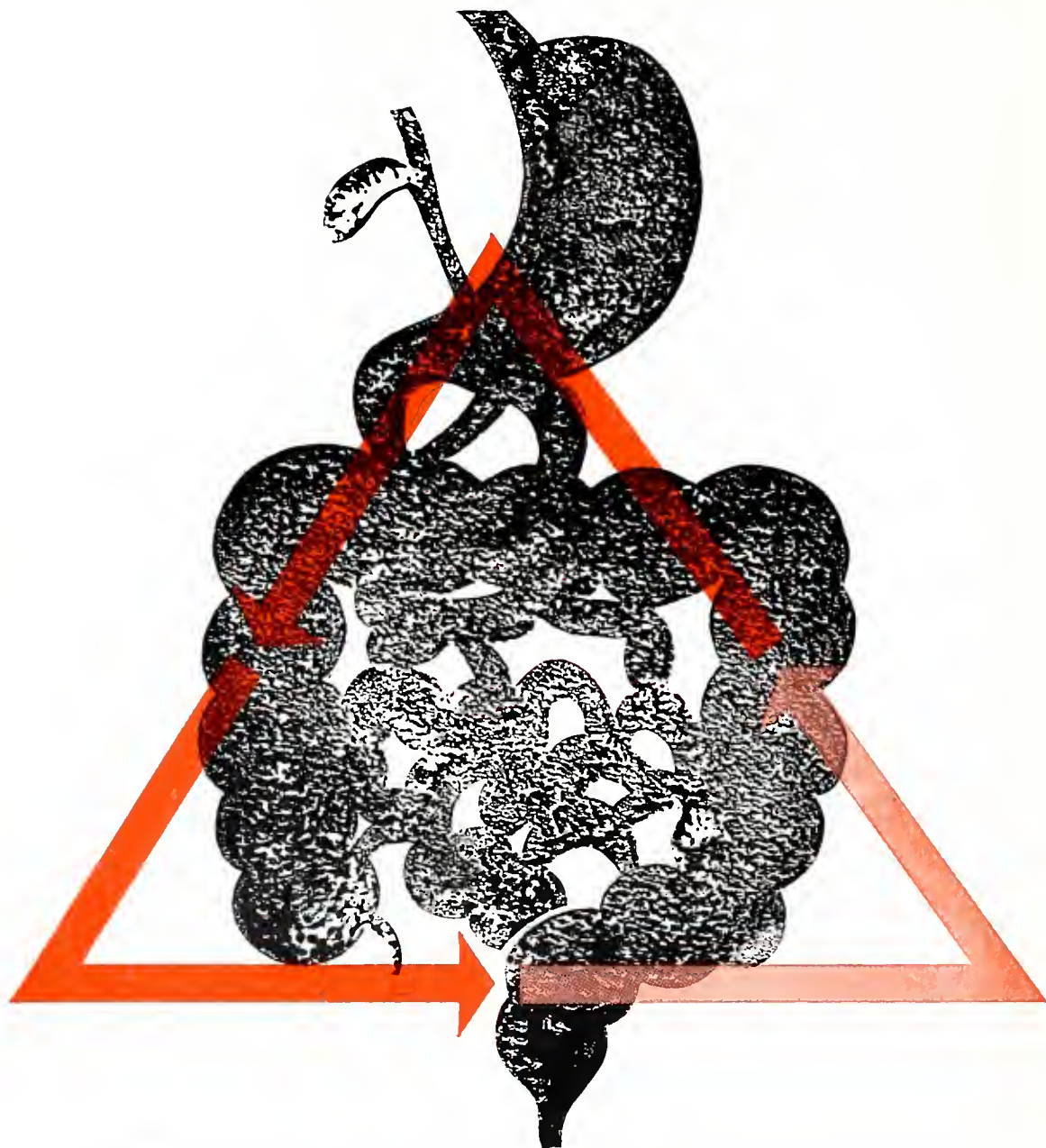
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No. 11

Current Comments on Influenza

J. W. R. NORTON, M.D., M.P.H., F.A.C.P.*

and

JACOB KOOMEN, M.D., M.P.H.

RALEIGH

Influenza, an illness of medical importance for several centuries, is again a significant topic among various medical specialties. We have been noting for some months a world-wide outbreak termed Asian influenza, the name having been derived from the area of origin.

General Outbreak

In order to put the present disease into its proper perspective it seems desirable to discuss briefly the background of epidemic influenza. For approximately 400 years epidemics and occasionally pandemics are now known to have occurred. Descriptions of influenza epidemics go back as far as 1500. In 1580 a pandemic was recorded. Hirsch reports that between 1800 and 1875 55 large outbreaks, of which 8 were pandemics, occurred. In our own United States the first large pandemic occurred in 1758. There were pandemics in 1782 and 1889-1890. Many individuals alive today were ill of that latter disease.

A special note relative to the 1918-1919 outbreak seems indicated, since so much of our present fear of influenza is derived from the experience obtained during the first World War and the year immediately following. At that time influenza was seen in three distinct waves, the second of which was an extremely severe one, characterized by a high mortality rate. The first cases were seen as early as 1915 or 1916, but certainly by 1918 much of the United States and the world as a whole, except for a few

isolated areas, were involved. The estimated total number of cases in this country was 20 million, with approximately 850,000 deaths due to the disease. In our Armed Forces, which were particularly hard hit, about 50,000 members died. An estimated 20 million died throughout the world.

The particularly high mortality of the 1918-1919 outbreak was in striking contrast to previous epidemics and pandemics. In the earlier instances the disease primarily attacked children under 10 years of age. When deaths occurred they were largely in the very young and the relatively few elderly patients who became ill. In the 1918-1919 pandemic severe illness occurred during the "prime of life." Deaths, while not confined solely to the 20-40 year age group, occurred in greater numbers in that particular group. In this respect, then, the 1918-1919 pandemic was very different from outbreaks previously recorded.

Influenza Viruses

The influenza viruses have been placed into four distinct groups, A, B, C, and D. Viruses of the A and B types have been responsible for epidemics and pandemics. Subdivisions of the family of influenza viruses are based upon differences in antigenic structure. Study of antigenic structure has now revealed four strains of influenza A virus. The first of these, swine influenza virus, was isolated in 1931, and in 1933 the first of the influenza viruses found to be definitely pathogenic for humans was discovered by Smith, Andrewes and Laidlaw. This strain was labeled "Influenza Virus A." A variant of the swine influenza is believed by some to have been

Read before the Sixth District (North Carolina) Medical Society, Chapel Hill, October 9, 1957.

*State Health Officer and Assistant Director, Epidemiology Division, North Carolina State Board of Health.

the causative agent of the 1918-1919 pandemic. The A group appears to have been in circulation through 1943.

In 1947 a new strain of A influenza viruses made their appearance. These were labeled "A prime strains." A prime strains produced influenza outbreaks in a more or less regular two or three-year cycle from 1947 until last year. Indeed, some of our present outbreaks in the Western United States are being produced by the A prime influenza strains today. A fourth strain of A influenza viruses began to appear in 1956 and were most strikingly demonstrated early in 1957. Late in 1956 a new strain of A virus was isolated in Holland, and early in 1957, at Denver, Colorado, an influenza A strain was isolated which was quite different from any of the A prime strains previously identified. This brings us to the present situation, caused by the so-called "Asian influenza virus," which is a variant of the A family and very different in antigenic structure from any of its predecessors. It may not be the first time, however, that this virus (or one of similar make-up) has appeared on the scene, since certain elderly individuals residing in Europe have been demonstrated to have antibody to this agent. These data are interpreted to mean that a virus of like antigenic structure has caused infection before and may possibly have been the causative agent in the pandemic of 1889-1890.

Asian Influenza

Let us now review the present influenza picture, beginning with the outbreak in Hong Kong in April of this year. Information coming out of North China indicates that as early as January, 1957, large outbreaks were taking place in that region, with progressive spread to Peking and Canton in March of this year. Very rapidly the disease spread to Singapore, Formosa, Borneo, Japan, the Philippines, Malaya, and Hawaii. The virus was introduced into Holland by air travellers.

As had been predicted, the influenza virus was not long in arriving in the United States, though in certain outbreaks its actual mode of transmission remains unknown. In particular, the first outbreak documented in this country occurred among members of the fleet in Newport, Rhode

Island. Illness was seen late in May and early in June. To date, however, no light has been shed as to the ultimate source of the Asian virus in the outbreak. Within a very few days the illness was also encountered in San Diego, California, having been introduced by service personnel from the Pacific area. From this point it spread rather rapidly through the state of California. Large outbreaks occurred in various military and civilian camps in that state.

A large encampment of young people at Grinnell, Iowa, however, served as the focus from which Asian influenza was first disseminated throughout most of our states. A girl who had attended a camp in California, where there was much influenza-like illness, attended the encampment at Grinnell, Iowa. Very shortly thereafter, of the 1,700 students attending, some 200 became ill of an influenza-like illness. The approximately 1,700 students were housed in dormitories intended for 900 students. Crowding, incident to such an arrangement, may have been a factor in rapid spread of the illness. Decision was made to care for the ill at Grinnell and to permit the well to go home. A large number of the young people returning to their homes became ill en route, and additional individuals became ill after arriving at their destinations. Thirty-nine young people from North Carolina attended the meeting. Shortly thereafter another gathering of 53,000 Boy Scouts took place at the Jamboree in Valley Forge, Pennsylvania. Two contingents from California showed appreciable illness on arrival. The Boy Scouts were bivouacked two per tent, an arrangement which is not ideal for the rapid spread of respiratory disease. The gatherings in commissaries and places of entertainment where the Boy Scouts were closely packed together, however, did permit rapid transmission of the influenza virus. About 600 Scouts became ill of what was later shown to be Asian influenza, then scattered to their home destinations, spreading the virus.

Ordinarily, influenza spreads rapidly only in winter months. In Australia, however, only limited spread has occurred in the cold months. In sharp contrast, Japan, located in a temperate zone, showed rapid spread of the disease in the summertime. Influenza

may spread rapidly in the tropics at any time.

Clinical Description

Despite the difference in agents, the disease itself differs in no way from the outbreaks of influenza previously seen — with the exception of the 1918-1919 outbreak, which, as you know, was of a much more severe nature than outbreaks occurring either before or since. The incubation period is from one to five days. Most cases will occur from one to three days after exposure. Onset is sudden, with severe headache, pain in the eyes, back and legs, and general malaise. Fever, while ordinarily ranging from 101-102 F., may rise to as high as 104 or 105 F. Cold-like symptoms are a constant feature. The fever lasts from two to five days; a feeling of general weakness persists for from 2 to 14 days or more. The laboratory findings are not striking. Leukopenia is the only rather constant feature. When complications occur, however, the white blood cell count may be expected to rise.

Treatment

Treatment is nonspecific and supportive. Patients should be advised to go to bed and to call the family physician. The use of antibiotics is contraindicated except in unusual or complicated situations which must be judged on their own merits. In some instances physicians will wish to give antibiotics as a protective measure to the very young, and possibly the very old, who are severely ill. Antibiotics may also be indicated in patients who are suffering from chronic or debilitating cardiac and pulmonary disease of non-allergic nature. Generally speaking, hospitalization is not indicated. Hospitals may show populations of antibiotic resistant *Staphylococci*, which pose special problems for influenza patients. The severely ill and those with complications will, of course, require hospitalization. At the present time it is impossible to give the rate that complications may be expected to occur.

Mortality

Less than 20 deaths associated with Asian influenza have been reported in this country at this writing. Each death appears to have been related to a fulminating pneumonia. In almost all cases pneumonia was

the result of severe multiple lobe *Staphylococcus* infection. In one instance it appears that death was due directly to interstitial pneumonia resulting from influenza virus infection.

Epidemiology

A brief discussion of the epidemiology of the disease is indicated. The experience accumulated to date indicates that epidemics in communities last from four to six weeks. In the Orient the attack rate was from 10 to 20 per cent of the community at large. In special groups — that is, in ship's crews, military recruits, and civilian camps and schools—an attack rate as high as 70 per cent has been noted. In the United States it was first thought that the disease was not highly contagious, since relatively little intra-familial spread took place. Apparently in the summer season contact is insufficient to result in rapid spread under our usual living conditions. When with fall and winter crowding occurs in closed spaces, spread appears to take place rapidly.

Laboratory Studies

Laboratory work involving influenza viruses is relatively simple. Isolation is carried out in embryonated eggs. In regard to this matter the United States was able to take advantage of the fact that its troops were stationed in many parts of the world. Asian influenza virus was isolated very early in the course of the outbreak in the Orient by the 406th General Medical Laboratory stationed in Japan. The virus was sent to the Walter Reed Army Research Institute for final identification. As noted earlier, the virus is quite different in its antigenic composition from immediate predecessors. Furthermore, while isolation was easy, the serologic problems relating to the complement fixation tests and the hemagglutination inhibition test proved to be more difficult than had been noted in A prime strains.

Possibly a word relative to the hemagglutination inhibition test is indicated. Influenza virus is one which has the ability to clump the red blood cells of certain mammalian species, including the chicken. In the presence of antibody to specific influenza virus clumping is inhibited. Using this technique, antibody can be demonstrated by determining to what degree

clumping of chicken red blood cells in the presence of influenza virus is inhibited. The test is called the hemagglutination inhibition reaction and is most useful in determining the presence of influenza antibody. Many serum specimens, however, contain nonspecific inhibitors which interfere with this reaction. Two specimens, "early" and "late," must be submitted to determine if a rise in antibody titer has occurred.

Diagnostic testing of individual patients becomes impossible when large numbers of people are ill. Even if there were sufficient funds, there would not be sufficient personnel to carry on large scale testing of specimens from everyone having an influenza-like illness. For this reason, and since identification cannot be used as a guide to treatment, it has been suggested that 6 to 12 specimens for diagnostic study be submitted from each locality reporting an outbreak. For serologic study 6 to 12 specimens should be submitted from patients early in the course of each patient's illness. Ten to 14 days later the second specimen should be obtained from each patient so that it can be determined whether a rise in antibody titer has occurred. Virus isolation studies may also be done. The latter is considerably more complicated than that necessary for serologic confirmation of infection. The patient gargles approximately 15 cc. of sterile broth, distilled water or saline, three times. If the gargled material is to be stored or transported a considerable distance, it should be placed under dry ice refrigeration. If the storage is only a matter of hours, ordinary ice refrigeration is sufficient. After the addition of penicillin and streptomycin, the gargled material is inoculated into the allantoic space of 11-day old embryonated hen's eggs. Allantoic fluid is harvested two days later. Ability of the allantoic fluid to cause clumping of chicken red blood cells establishes the presence of virus.

Vaccine

The Asian influenza virus was transmitted to six manufacturing drug houses on May 22, 1957, by the Public Health Service. The drug houses were well equipped to produce influenza vaccine rapidly, since manufacturers have been producing influenza vaccine for 14 years. The earliest releases of vaccine occurred on August 12. As of

October 1, 1957, approximately 13.5 million cc. had been released.

Influenza vaccine has a rather interesting history. The very first vaccine which became available in 1941 appeared to be effective in approximately 70 per cent of the individuals inoculated. In 1947 it was found that the vaccine was no longer effective owing to the presence of a new type of influenza A virus which we have since come to know as the A prime strain. New strains have been major problems in protection against influenza. Possible mutation of influenza viruses makes it less likely that any vaccine from the past will be highly effective against a new strain. In the present situation, however, we have a very special field for investigation and study. The isolation of the virus in the Orient and the prompt beginning of manufacture of vaccine has made it possible to immunize a proportion of the population before exposure to the new agent. This is the first time it has been possible to inoculate against the "epidemic" strain before an epidemic occurred.

Related problems

There have been problems around vaccine, however. At first, it appeared that this virus did not grow as well in eggs as did earlier strains and that relatively small amounts of vaccine could be harvested from each egg. The situation has improved on repeated egg passage. Now six or seven doses of vaccine may be obtained from each egg. The supply of eggs in itself has been a matter of some concern. Earlier, approximately 50,000 eggs per week were used in the production of routine vaccines. At the present time about one million eggs per week are being used. Arrangements have been made between the biologics houses and the producers of embryonated hen's eggs, so that we may expect no shortage of eggs.

The concentration of influenza virus in the vaccine has been a matter of discussion. The advisers to the Military and Public Health Services have agreed on a concentration of 200 chicken cell agglutinating units per cubic centimeter of vaccine. (The chicken cell agglutinating unit is based upon the ability of the virus to clump chicken red cells, and it is used as a measure of virus concentration in the vaccine.) It should be stated, however, that the

Armed Forces prefer a vaccine of 500 units per cubic centimeter. Field trials have demonstrated that the rate of reactions is considerably higher when the more concentrated vaccine is used.

The question of dosage has likewise received considerable discussion. The committee advisory to the Public Health Service, which includes our Dr. Edward C. Cur-
nen, has settled upon the following dosage schedule: 0.1 cc. will be given intracutaneously or subcutaneously to children from the age of 3 months up to the age of 5 years, and the dose will be repeated one to two weeks later. For children 5 to 12 years of age 0.5 cc. of the vaccine given subcutaneously is recommended. A second inoculation again will be given one to two weeks later. The recommended dose for age 13 and older is 1 cc. given once subcutaneously. After considerable controversy the Advisory Committee has again approved 1 cc. given subcutaneously for adults. It was recognized that antibody response to 0.1 cc. intradermally given in two doses, with an interval of a week or more, has in a few cases observed been approximately the same as that obtained from 1 cc. given subcutaneously. Large field trials carried out in the past 16 years used 1 cc. subcutaneously. It was decided not to depart from this dosage schedule since this was our only broad basis of reference for determining the effectiveness of influenza vaccine. The Armed Services intend to give 1 cc. doses of vaccine subcutaneously and to repeat the 1 cc. dose using the same route one month later. Reactions to the vaccine have been relatively mild. With the subcutaneous route approximately one half of the persons may be expected to develop soreness locally. A somewhat smaller number will note pain of the entire limb. Approximately 15 per cent will show mild chills and a slight rise in temperature. It is worth noting that influenza vaccine cannot be made completely reaction free since the virus itself is a toxic substance. Vaccine should be withheld from persons who are allergic to eggs, chicken feathers, or chicken.

Use of the vaccine is of some interest. If one wishes to prevent immobilization of a community, vaccination should be aimed at the productive group and the various workers necessary to the life of the community.

If, on the other hand, one primarily wishes to prevent death, using the experience of the last several outbreaks, vaccination programs should be aimed at the very young and the very old. We have little in the way of guide lines to establish where we should aim. Deaths seen so far have been largely in persons beyond 10 years of age and in the middle-aged group. If this is a guide to the future experience, vaccination should be directed towards persons in the teenage years and in the productive age group. In this one respect, the mortality has shown a similarity between this outbreak and the 1918-1919 outbreak.

The handling of the Salk and Asian Influenza vaccines offers an interesting contrast. In the former there were many controls: Federal purchase, controlled allocations, and priorities. No real controls are in force for the handling of the Asian influenza vaccine. Free enterprise in the usual trade channels provides no special consideration for the individual (including the physician), and no health or strategic economic priorities. There is only the gentlemen's agreement among the manufacturers to supply the states according to population. North Carolina gets 2.6 per cent of that for civilian use. The recommendations as to protection on the basis of national defense and community and family considerations have no force and are largely ignored. It is enlightening to have the contrasting experiences so close together. There have been instances of unhappiness with both plans.

North Carolina Experience

The North Carolina experience is, of course, of special interest to us. In late June and early July 39 persons returned to this state from the Grinnell, Iowa, meeting. So far as we can determine 13 of them became ill of influenza-like disease. The first cases were reported from Winston-Salem. Very early the State Board of Health Laboratory, which is equipped with a virus diagnostic set-up, was able to demonstrate infection with the Asian strain of influenza virus. Subsequently a number of small one-family outbreaks occurred in mid-July. Returnees from the Boy Scout Jamboree at Valley Forge also introduced the agent into the state. Some of the Scouts were shown to be infected by the Asian influenza virus strain.

Relatively little respiratory disease was seen in the month of August and early in September.

At the present time the State Board of Health is receiving information from local health departments relative to the estimates of cases of influenza-like disease occurring in each of the 101 health jurisdictions. Influenza-reporting, for reasons which are obvious to you, such as the fact that many diseases resembling each other occur in this group and that when large numbers occur physicians are too busy to report individual cases, has made reporting of cases ineffective. North Carolina, in keeping with modern trends and the practice in most states, does not report individual cases. We have asked our health officers, however, to estimate, based upon industrial absenteeism, absenteeism from schools, and a survey of the general practitioners, internists, pediatricians and hospitals in the community, numbers of cases. At the present time we are receiving reports of approximately 2,000 influenza-like illnesses per week — 6,093 last week (first week in October). Two localized outbreaks have come to the attention of the State Board of Health. One of these, presently occurring in a State Teacher's College in Winston-Salem, has numbered approximately 100 persons. The second outbreak, occurring in a State Teacher's College in Durham, has shown some 200-300 persons ill in a population group of 1300. In both instances the disease has been mild. In the Durham outbreak specific infection has been demonstrated by

the presence of antibody among those ill. To date, of 364 blood specimens examined from the entire state, 104 have shown the presence of measurable antibody to the Asian strain of influenza virus. Many, however, have not yet been confirmed by a subsequent rise in titer to this strain of virus. The level of antibody titer to this particular virus has not been striking.

Summary

In summarizing the present situation it should be pointed out that, though deaths have occurred, the disease generally has been mild. Facilities are available for laboratory confirmation. In treatment a calm attitude is needed. The use of antibiotics is generally contraindicated. The disease, should an attack rate of 10-20 per cent be seen, could seriously disorganize community function. This must be taken into consideration in civil defense preparation since protection against Asian influenza might be of very great importance. We have a special opportunity, the first presented in influenza history, to immunize a large proportion of the population against the specific agent producing the influenza currently being seen. To the private physician, influenza may mean a large patient load and pressures for hospitalization, use of antibiotics and use of vaccine — all which may be difficult to place in proper perspective. Indications to date, however, are that a large supply of the vaccine will be produced rapidly and—we hope—sharply reduce the incidence of the disease.

Although some of us may still persist in referring to women as the weaker sex, it is apparent that, at the present rate, the weak shall inherit the earth. It is truly a case of "the fragile male." Bond, J. O.: *The Fragile Male*, Geriatrics 12:489 (Aug.) 1957.

While total death rates have been declining steadily and comfortably over the past half century, rates for women have dropped at a progressively faster rate than have those for men. This has been most marked in the white population where male death rates have declined 50 per cent since 1900, contrasted with a 65 per cent decrease for females. Bond, J. O.: *The Fragile Male*, Geriatrics 12:489 (Aug.) 1957.

A Study of Diffuse Cortical Atrophy of the Brain

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Diffuse cortical atrophy of the brain has been recognized more frequently in recent years mainly because of the increased use of pneumoencephalography in the diagnostic work-up of neurologic diseases. More information concerning the cause, symptomatology, and natural history of this far from rare entity seems indicated. The past literature on the subject, though sparse, does contribute some interesting data. Diffuse degenerative changes in the cortex are known to occur with various types of vascular disease, chronic alcoholism, central nervous system infections, asphyxia, and certain birth and developmental conditions. The atrophy associated with repeated trauma to the head such as results from boxing, of course, is well known. Unilateral changes are not uncommonly the result of cerebrovascular accidents. Partial thrombosis of the internal carotid artery manifested clinically by progressive hemiparesis has been cited as the cause of generalized atrophy⁽¹⁾. Presenile dementia (Pick's disease and Alzheimer's disease) is a rare cause of cerebral degeneration.

Fisher and Mann⁽²⁾ studied a large group of patients whose presenting symptom was convulsive seizures beginning after the age of 30. One third of this group demonstrated by pneumoencephalogram some degree of atrophy, the cause of which was not obvious. No typical seizure pattern was evident, and no relationship was found between the amount of cortical wasting and the protein content of the spinal fluid. About half of the electroencephalograms done on these patients were reported as normal, and most of the remainder showed a generalized cerebral dysrhythmia without specific diagnostic features.

Another study of 20 adults with cortical atrophy of unknown cause was presented by Plum⁽³⁾. These patients had seizures, manifestations of corticospinal tract involvement, or both. Although mental dullness

appeared later in some cases, the presence of atrophy did not necessarily imply early dementia. Jackson⁽⁴⁾ reported convulsive seizures in 75 per cent of the patients he observed. Fleminger⁽⁴⁾ recalled that seizures were the most common symptom recorded in his group.

The present study was designed to shed more light on this complex problem. Of especial concern and interest were: (a) the various causes, (b) the presenting signs and symptoms, (c) pertinent laboratory data including electroencephalograms, and (d) the natural course of the disease. The case material consists of 50 patients observed during the past five years who showed diffuse cortical atrophy by pneumoencephalogram. Thirty were seen at Duke Hospital and 20 were admitted to the Durham Veterans Administration Hospital. Only adults were included in the study. Patients ranged in age from 25 to 64 years, with the majority (31) falling in the 40 to 60 age group. Twenty-one had had symptoms for less than one year when first studied; 9 had been ill from 8 to 40 years.

Symptoms and Signs

The most frequent symptoms observed were those associated with changes in the mental status. Thirty-six patients showed some change in this sphere, although it was the presenting symptom in only 17. The most common complaints made by either the patient or relatives were forgetfulness and childish behavior associated with unstable mood. Other changes frequently mentioned were aggressive, agitated behavior, confusion, slow thinking, and disorientation; less frequently reported were depression, hallucinations, delusions, and anxiety.

The second most common symptom was that of convulsive seizures, which appeared in 33 patients and constituted the presenting symptom in 25, thus making it the most common initial complaint. The seizures were of the *grand mal* type in 18 patients, focal motor in 7, psychomotor in 3, atypical *grand mal* in 3, and both psychomotor and

Table 1

Symptoms of Cortical Atrophy

Symptom	No. Patients
Mental changes	36
Convulsive seizures*	33
Other neurologic complaints	24
Headaches	18

*Most frequent presenting complaint

grand mal in 2. There was nothing characteristic about these convulsions either as to type, onset, frequency, or duration.

Twenty-four patients had neurologic symptoms. A persistent unilateral hemiparesis, sensory disturbance, or both were noted in 16 of the 24. A more transient unilateral disturbance of a similar type, lasting from 15 minutes to several hours, was recorded by 4. Transient speech difficulties were noted by 4; permanent speech troubles were mentioned four times. Three patients had symptoms best described as generalized numbness, ataxia, and weakness. Three had transient episodes of diplopia, and 3 intermittent dimness of vision. Two complained of gross tremor and 1 of persistent dizziness.

A combination of seizures and mental symptoms was seen in 20 patients, seizures and neurologic changes in 15, and mental and neurologic abnormalities in 17. Only 10 patients had all three of the above symptoms. In addition to these, 18 had headaches of various types. These headaches were entirely dissimilar in location, type and severity, but not infrequently were a major complaint. The family history was noncontributory in all instances. Complicating disease processes included hypertension in 12 persons, diabetes in 2, pan-hypopituitarism in 1, lues in 1, and arteriosclerotic heart disease in 1.

Neurologic and Physical Findings

The neurologic examination on admission revealed definite abnormalities in 29 instances. Fifteen patients (a majority) showed hemisensory loss or hemiparesis. Five showed generalized spasticity and 1 generalized ataxia. Cranial nerve disturbances and visual field defects were present in 4 others. Twelve patients were found to be hypertensive and 18 showed definite evidence of widespread arteriosclerosis. Cardiomegaly was found by chest film in 5.

Table 2

Pneumoencephalographic Pictures in Cortical Atrophy

Outstanding Defect by Pneumoencephalogram	No. Patients
1. Ventricles enlarged on both sides with generally increased subarachnoid air	10
2. Ventricles normal but definite increase in subarachnoid air, generalized	9
3. Increased air over one cerebral cortex	8
4. Ventricle on one side larger than its opposite	7
5. Frontal atrophy with increased subarachnoid air	5
6. Both ventricles enlarged	5
7. Frontal atrophy with enlarged anterior horns	4
8. Para-sagittal atrophy	2

Accessory Findings

Laboratory data

Laboratory studies were of interest in that only 1 of 49 serologic tests for syphilis was positive. Blood sugar values were found to be normal in 18 patients, high in 2, and 53 per 100 cc. in 1. Lumbar puncture was performed 47 times. In the majority of cases all findings were within normal limits. Cerebrospinal fluid protein values were normal except in 15 cases where the levels ranged between 55 and 82 per 100 cc. The initial pressure was normal except in 2 cases where the recordings were 230 and 420 mm. of water. Blood cell counts were abnormal in only 2 cases; one examination showed 13 polymorphonuclears, and another 160 crenated red blood cells.

Skull films and pneumoencephalograms

Skull films were interpreted as being within normal limits in 44 cases. Old fractures were found in 3 instances. Hyperostosis frontalis was diagnosed once, and bird shot was demonstrated outside the cranial cavity in 1 patient.

Pneumoencephalograms were performed on all patients. All showed evidence of generalized atrophy, but certain areas were particularly involved in some patients and the changes were not always absolutely symmetrical. In certain instances the ventricles failed to fill and abnormal amounts of air were observed only in the subarachnoid spaces. In others the excessive air filling was seen only in the ventricles (fig. 1). Table 2 shows the various pneumoencephalographic pictures and the number of patients demonstrating each type. Some degree of frontal atrophy was present in 13 instances. Arteriograms were done in 4 patients, including those with transient neuro-

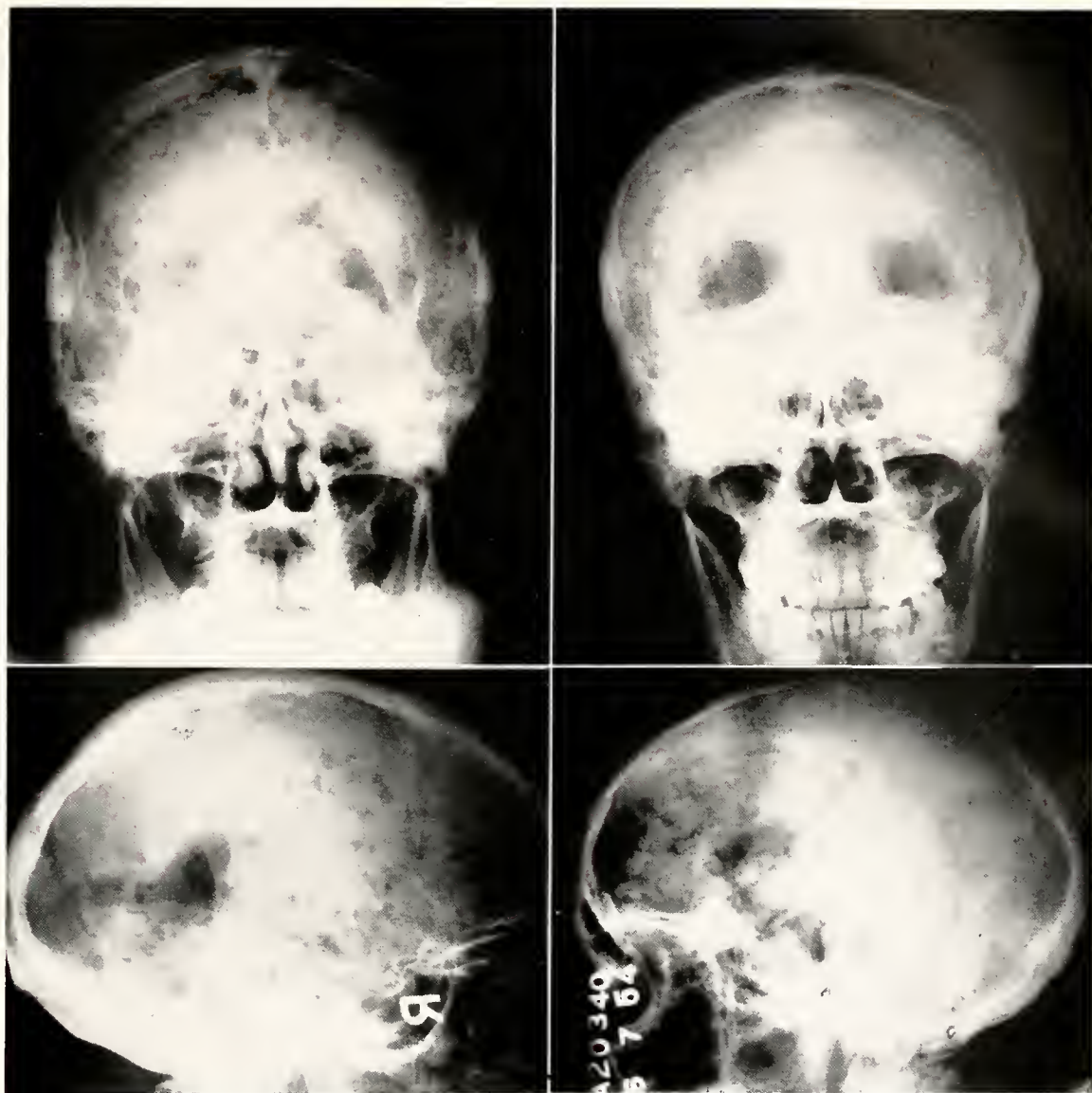


Fig. 1. Air patterns of atrophy. A. Para-sagittal atrophy. B. Ventricular dilatation. C. Focal pockets of subarachnoid air. D. Marked frontal wasting.

logic signs, but no vascular lesions were demonstrated.

Electroencephalograms

Out of 46 electroencephalograms taken, 16 were found to be within normal limits. Of those which were abnormal, there emerged no uniform pattern suggestive of cortical atrophy. Seventeen patients showed either a generalized dysrhythmia with a predominance of slow waves, or a diffusely irregular pattern without change in amplitude. In 6 of these the abnormality was more prominent on one side. Bursts of generalized slow wave activity were ob-

served in 4 instances. A focal disturbance with increased amplitude was located in the temporoparietal region in 6 cases and in the occipital area in 2 (fig. 2).

Generalized paroxysmal bilateral delta and theta waves with a frequency of 1 to 6 per second were seen in one instance of a large hemorrhage above the pons. There was no relationship between cases showing a focal electroencephalogram and a pneumoencephalogram with the abnormality predominating on one side. There seemed to be no relationship between the EEG and the clinical type of the illness; patients with

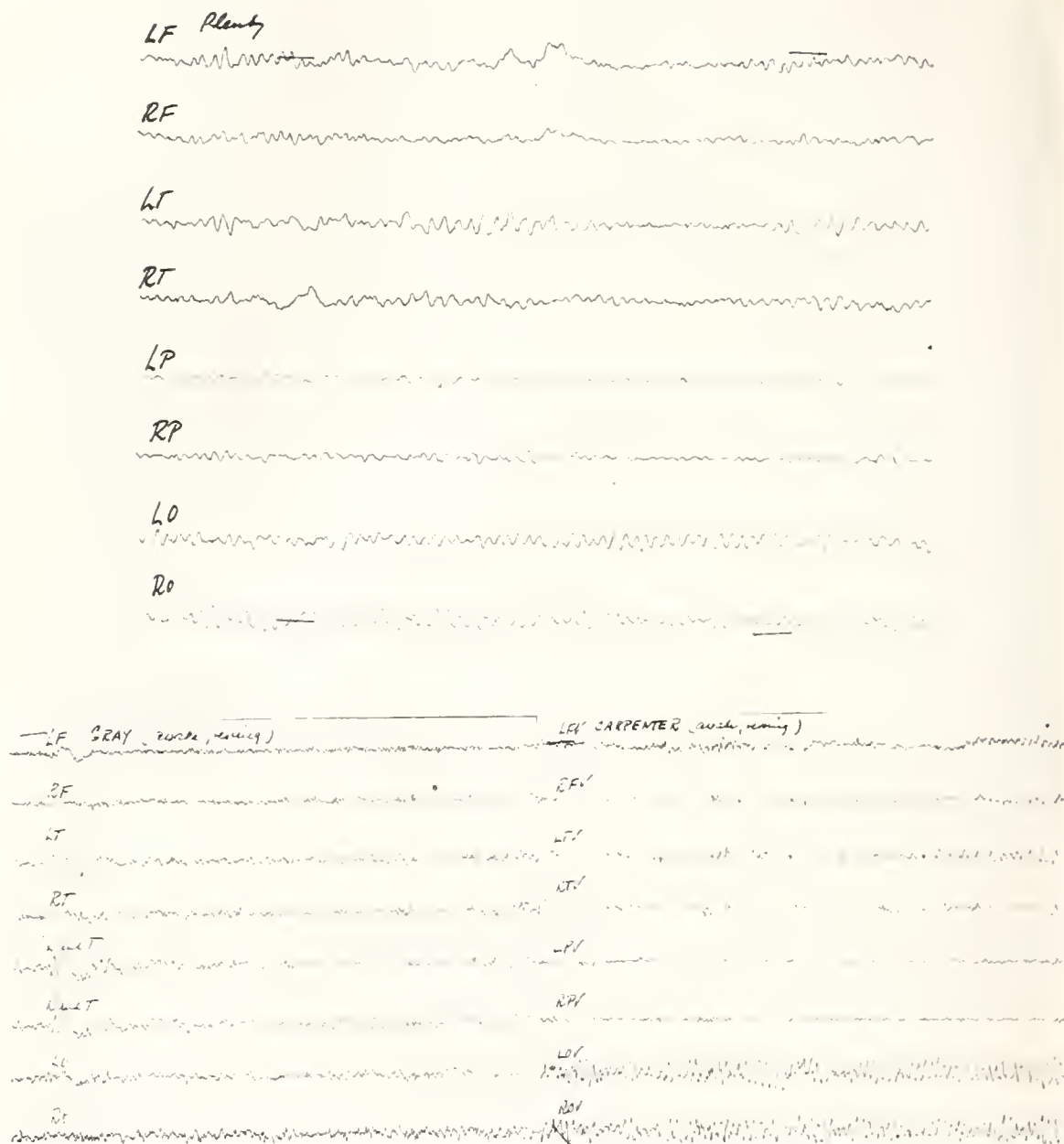


Fig. 2: EEG tracings in atrophy. A. Generalized slow waves, irregular form and normal amplitude. B. Slow waves, enlarged amplitude, left temporal focus. C. Slight generalized dysrhythmia.

tracing as were those who were seizure free.

Possible Causative Factors

An attempt was made to determine from the chart what factors could be incriminated as having contributed to the generalized atrophy of the cortex. In many cases multiple etiologic factors were present, making it impossible to determine the most

important one in any specific case. Chronic alcoholism and a history of repeated head trauma were frequently associated in the same individual. Vascular disease was thought to play a prominent role in 18 instances. Evidence for vascular disease included significant hypertension, a past history of strokes, diabetes with advanced vascular disease, or a history of intermittent neurologic changes. Chronic alcoholism

Table 3

Possible Etiologic Factors in Cortical Atrophy	
Possible Etiologic Factors	Times Implicated
Vascular disease	18
Chronic alcoholism	14
Head trauma	13
Unknown*	14
Hypoglycemia	2
Repeated convulsions	1
Meningitis	1
Generalized syphilis	1
Probable birth injury	1
Head surgery	1

*Four with generalized arteriosclerosis; 5 over 55 years old.

possibly played a part in 14 instances, and a history of severe head trauma was obtained in 13. No obvious causative condition could be uncovered in 14 patients. Of these, 4 had evidence of widespread arteriosclerosis with arteriosclerotic changes in the fundi, and 5 others were over 55 years of age. Repeated attacks of hypoglycemia were perhaps of importance twice—once in a diabetic on insulin and once in a patient with pan-hypopituitarism. In one instance the atrophy seemed related to idiopathic epilepsy and repeated seizures over many years. Other possible causative factors present in 1 patient each were meningitis, generalized syphilis, probably birth injury, and head surgery (table 3). The only difference in the patients from Duke Hospital and the Veteran's Hospital was the increased number of chronic alcoholics associated with repeated head trauma observed in the latter institution.

Postmortem examinations were done on 3 of these patients. In 1 a large hemorrhage of the mid-brain was found; in 2 generalized cerebral arteriosclerosis with encephalomalacia was evident.

Comment

The largest single group of patients with cortical atrophy fall in the 40 to 60 year age group and show definite evidence of degenerative vascular disease of the brain. Many of these patients had in their history episodes suggestive of strokes or transient periods of cortical ischemia. It is known that a single stroke is followed by a marked drop in the cerebral blood flow⁽⁵⁾. This drop cannot be explained by the infarct alone, and is thought to be due to the diffuse cerebral arteriosclerosis which precedes the vascular accident. Cerebral blood flow is even further reduced in patients with more

chronic cerebral vascular disease, and in this group the cerebral oxygen consumption is also low. It seems likely that the atrophy found in those patients showing obvious signs of cerebral vascular insufficiency is the result of a reduction in the blood supply secondary to the narrowing and occlusion of the smaller cerebral vessels. Although diffuse atrophy has been reported with partial occlusion of the internal carotid arteries, no case of this type was discovered in the current series.

An explanation similar to that presented above may also hold for some of the 14 patients in whom no obvious cause for the atrophy could be found. Four of these people had definite evidence of generalized arteriosclerosis, and another 5 were over 55 years of age; in none were there signs of localized disease. Baker⁽⁶⁾ has demonstrated certain hyalin and fibrotic changes occurring in the walls of the small cerebral arteries with age. In a study by Heyman and associates⁽⁵⁾ of a group of persons over 45 years of age showing no evidence of cerebral vascular disease, a drop was observed in the cerebral blood flow and an increase in the cerebral vascular resistance. They believed this change to be "caused by a moderate degree of arteriosclerosis insufficient to alter cerebral function to the point of overt manifestation." Brody⁽⁷⁾ has found a marked decrease in the neuronal density of the cerebral cortex with advancing age. It seems justified to wonder if in the present study some of the atrophies classified as of unknown etiology might also be explained on a vascular basis without showing localizing signs. Of course the decreased cerebral blood flow and increased vascular resistance might also be secondary to a loss of neurons dying from "old age," with resulting decrease in metabolic requirements. In this instance the circulatory changes would follow rather than cause the metabolic slow-down. Although many patients in this study had hypertension, this factor alone will not alter the cerebral blood flow⁽⁸⁾. Only 4 case histories out of the entire group were the least suggestive of the classic clinical picture of either Pick's or Alzheimer's disease, characterized by progressive dementia and speech difficulty.

Scheinberg⁽⁹⁾ has demonstrated a definite

relationship between the mental status of patients with chronic cerebral vascular disease and the cerebral metabolic rate. Patients having vascular disease but showing no mental changes had a lower cerebral blood flow than normal, but the cerebral oxygen utilization was normal. Those with mental changes had a marked decline in both cerebral blood flow and utilization of oxygen, indicating that by the time mental changes occur the process of vascular disease is diffuse. It is of interest that the largest single complaint of the current group of patients was related to changes in the mental status.

Since recurrent head trauma plays such a prominent role in the development of brain atrophy, it would have followed that head injury due to the oft repeated convulsions of idiopathic epilepsy would have appeared more than once among the causative factors. One reason for this apparent discrepancy might be that pneumoencephalograms are seldom done on patients who have had idiopathic epilepsy for many years.

The cause of the diffuse brain atrophy seen so frequently in alcoholics did not become evident in this study. Whether this association is due to a direct toxic effect on the brain or is secondary to frequent head trauma is not clear. Repeated bouts of hypoglycemia are known to produce degenerative changes in nervous tissue. A low blood sugar level was possibly a contributing factor in 2 patients—1 a diabetic with frequently repeated insulin reactions, another a patient with pan-hypopituitarism and a low blood sugar.

The absence of a typical electroencephalographic picture substantiates the observations of previous workers. In the series reported by Levin and Greenblatt⁽¹⁰⁷⁾ a predominance of slow wave tracings were noted, and all patients with convulsive seizures were found to have some brain wave abnormality. In the present series the abnormal EEG patterns were equally non-specific; however, patients with seizures not infrequently had perfectly normal records. The same authors reported a higher incidence of abnormal tracings among patients showing marked atrophy; such a relationship was not demonstrated in the current group of cases. Although some

records revealed focal disturbances, there seemed to be no correlation between this finding and the presence of unilateral neurologic signs, jacksonian-type seizures, or pneumoencephalograms showing asymmetrical atrophy.

The prognosis depended upon the etiology. In most instances the course was intermittently but progressively downhill, although some individuals recovered from an acute bout of symptoms. Progressive mental deterioration was not necessarily the rule.

Summary

Charts of 50 patients with a diagnosis of diffuse cortical atrophy proven by pneumoencephalograms were reviewed for the purpose of determining more about the causative factors, symptomatology, and natural history of this far from rare disorder.

Most of the patients fell in the 40 to 60 year age group. The most common symptoms were mental changes, convulsive seizures, and neurologic abnormalities. Seizures were of various types and were most often the presenting complaint. Hemisensory or motor losses were the most common neurologic sign.

The spinal fluid examination was usually normal except for an occasional slightly elevated protein content. Skull films rarely showed old fractures. The electroencephalogram was often normal, and, if abnormal, most frequently showed generalized dysrhythmia of a nonspecific type.

Causative factors most commonly encountered were vascular disease, alcoholism, and head trauma; more rarely encountered were hypoglycemia, meningitis, syphilis, birth injury, and head surgery.

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The Present Status of Ethyl Ether, Vinyl Ether and Ethyl Chloride in Anesthesia

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Since October 16, 1846, when William Morton gave the first public demonstration of ether anesthesia at the Massachusetts General Hospital in Boston, ether has continued to be the most widely used general anesthetic. Despite numerous attempts to supplant diethyl ether, the drug has remained the reliable standby of inhalation anesthesia. Although ethyl ether is a potent anesthetic agent, it possesses a wide margin of safety. All other inhalational agents must demonstrate some specific advantage over it in order to be selected for a given surgical or obstetric procedure. Since ether is the standard by which all new anesthetics are measured and thus has received extensive investigation, it will be considered in more detail than divinyl ether and ethyl chloride.

Many misconceptions about the pharmacologic actions and the physiologic effects of ether anesthesia still prevail in some modern textbooks of pharmacology. The purpose of this paper is to clarify many of these misconceptions.

Open drop ether anesthesia is often aluded to as the safest anesthetic. This is true only in the hands of the untrained anesthetist, a dangerous situation in itself. If this technique is used, oxygen should be insufflated under the mask via catheter at a rate of 1 to 2 liters per minute in order to maintain adequate oxygen concentrations. The carbon dioxide concentration under the

mask remains around 1 per cent in the awake child, even though the oxygen flow is increased to 3 liters per minute (fig. 1). The absence of means to compensate respirations with this technique in order to maintain adequate alveolar ventilation is a definite disadvantage. The use of mineral oil or olive oil in the eyes to prevent conjunctivitis is erroneous, since the oil acts as a solvent for ether and prolongs its contact with the conjunctiva. Protection of the eyes with a rubber dam is beneficial.

Considerable nonsense has also been written about the harmful effects of impurities found in ether. Many anesthetic complications and deaths have been attributed to the presence of impurities rather than to improper administration. Traces of aldehydes or peroxides have no apparent harmful effect.

Ethyl Ether

Pharmacologic actions

The physiologic effects of ether anesthesia are the combined result of two pharmacologic actions—direct depression and reflex sympathoadrenal release. Thiopental aggravates the direct depressant effect and suppresses the reflex sympathoadrenal effect. Curare significantly diminishes the output of epinephrine, presumably by inhibiting the response of the adrenal gland to its innervating cholinergic secretory fibers⁽¹⁾. The reflex sympathoadrenal effects are more apparent during light anesthesia, while the direct depressant effects become manifested during deep anesthesia.

The administration of diethyl ether re-

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EFFECT OF ADDITION OF O₂ UNDER OPEN DROP MASK
ON INSPIRED CO₂ AND O₂ CONCENTRATIONS IN AWAKE CHILDREN

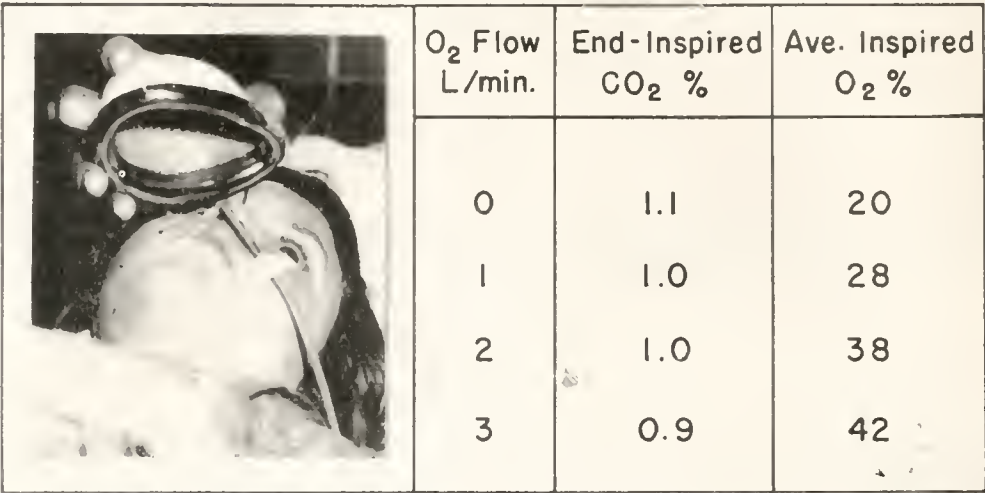


Figure 1

sults in a reflex stimulation of the sympathetic nervous system and the adrenal medulla. This, in turn, results in the release of approximately 1 microgram per kilogram per minute of epinephrine and nor-epinephrine. The infusion of this amount of epinephrine and nor-epinephrine will reproduce many of the physiologic effects of ethyl ether anesthesia. There is available ample evidence of the difference in the circulatory effects of epinephrine and nor-epinephrine. When mixtures containing equal proportions of the two sympathomimetic amines are infused, the epinephrine effects apparently predominate. Some of the physiologic effects of nor-epinephrine are counteracted by smaller amounts of epinephrine.

Autonomic cardiovascular reflexes: Autonomic cardiovascular reflex disturbances may be initiated by nonphysiologic stimuli during the course of surgery. The sensory and motor elements of the somatic nervous system are depressed during general anesthesia. The function of the autonomic nervous system remains active, however, until profound metabolic depression is produced. Burstein and Rovenstine⁽²⁾ attributed the celiac plexus reflex to increased tone of the splanchnic sympathetic nerves resulting from atropine administration, ether anesthesia, and stimulation in the region of the

celiac ganglion during upper abdominal surgery, to produce a reflex in pulse pressure. There is a marked fall in systolic pressure, with relatively little change in the diastolic pressure or pulse rate (fig. 2). The reflex is intensified by administration of atropine but alleviated by vasopressors. The carotid sinus reflex, which is parasympathetic in nature and manifested by hypotension and bradycardia, is inhibited by the administration of atropine and ether anesthesia (fig. 3). Some believe that deep anesthesia is essential to abolish these cardiovascular reflexes during surgery. However, extensive personal experience with ethyl ether analgesia for cardiac surgery

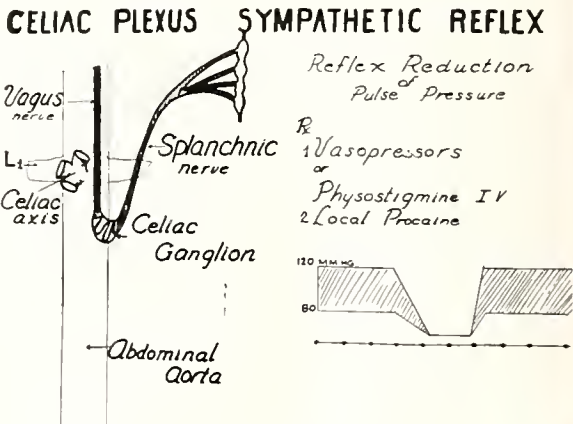


Figure 2

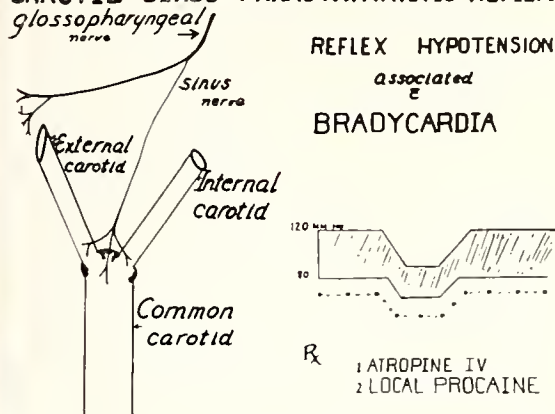
CAROTID SINUS PARASYMPATHETIC REFLEX

Figure 3

reveals a remarkable absence of deleterious reflexes. Ether analgesia does not depress the homeostatic sino-aortic mechanism and thus permits normal compensatory adjustment, while deeper anesthesia often abolishes this compensatory mechanism (table 1).

Effects on the central nervous system

Neurophysiologic studies of the anesthetic state have recently received great impetus from the investigative work of French, Verzeano, and Magoun⁽³⁾. These studies strongly suggest that the modification of neural transmission through the ascending reticular system is of major importance in the production of the anesthetic state. They have demonstrated that ether anesthesia blocks impulses conducted corticopetally through the reticular system, while the lateral sensory pathways continued to conduct with unimpaired intensity. This differential block is attributed to the multisynaptic formation of the medially placed reticular pathway as contrasted to the paucisynaptic lateral brain stem pathways.

The studies further demonstrated that lesions in the ascending reticular system produced slow patterns on the electroencephalogram typical of sleep or anesthesia, while stimulation of this area produced desynchronization manifested by a fast activity on the electroencephalogram. Thus it is suggested that ether analgesia is primarily stimulating to the reticular system and that the electroencephalographic pattern represents a desynchronization of the cortical activity. Artusio⁽⁴⁾ has postulated that the

Table 1
Stage of Anesthesia

- I. Plane
 1. Minimal amnesia—analgesia
 2. Moderate analgesia—complete amnesia
 3. Complete amnesia—analgesia supplemented ether depth Unconsciousness
- II. Delirium
- III.
 1. Partial sensory loss
 2. (Complete sensory loss) Unsupplemented
 3. (Surgical relaxation) ether depth
 4. Intercostal paralysis
- IV. Medullary paralysis

effect of diethyl ether is exerted in two places to block sensory impulses from reaching the cortex. During ether analgesia there is a block of the sensory fibers coursing laterally and a block at the cortical level without depression of the reticular system, which is manifested by the fast activity on the electroencephalogram (fig. 4A). Increasing the concentration of ether to produce anesthesia results in depression of the reticular system, which is manifested by the slow activity on the electroencephalogram (fig. 4B).

Cerebrospinal fluid pressure: Ether dilates the meningeal and cerebral vessels, but there is no significant increase in cerebrospinal fluid pressure as was formerly thought⁽⁵⁾. The increase in cerebrospinal fluid pressure associated with ether is usually the result of a rough induction, with straining, coughing, breath-holding, laryngospasm, bronchospasm, and upper respiratory obstruction. A bucking response during endotracheal intubation and hypoventilation, with associated hypoxia and hypercarbia, invariably produces considerable increases in cerebrospinal fluid pressure. It is now realized that a smooth induction and the maintenance of adequate alveolar ventilation does not produce a significant rise in the fluid pressure during ether anesthesia.

Neuromuscular blockade: Gross and Culen⁽⁶⁾ have demonstrated that ether anesthesia reduces the response of skeletal muscle to intra-arterial injection of acetylcholine and electrical stimulation of the nerve. This curariform effect is antagonized by neostigmine. Clinically, the synergistic effect of curare and ether at the motor end-plate is apparent, and smaller doses of curare can be used to produce muscular relaxation during anesthesia with ether than

ELECTROENCEPHALOGRAPHIC PATTERN WITH ETHER

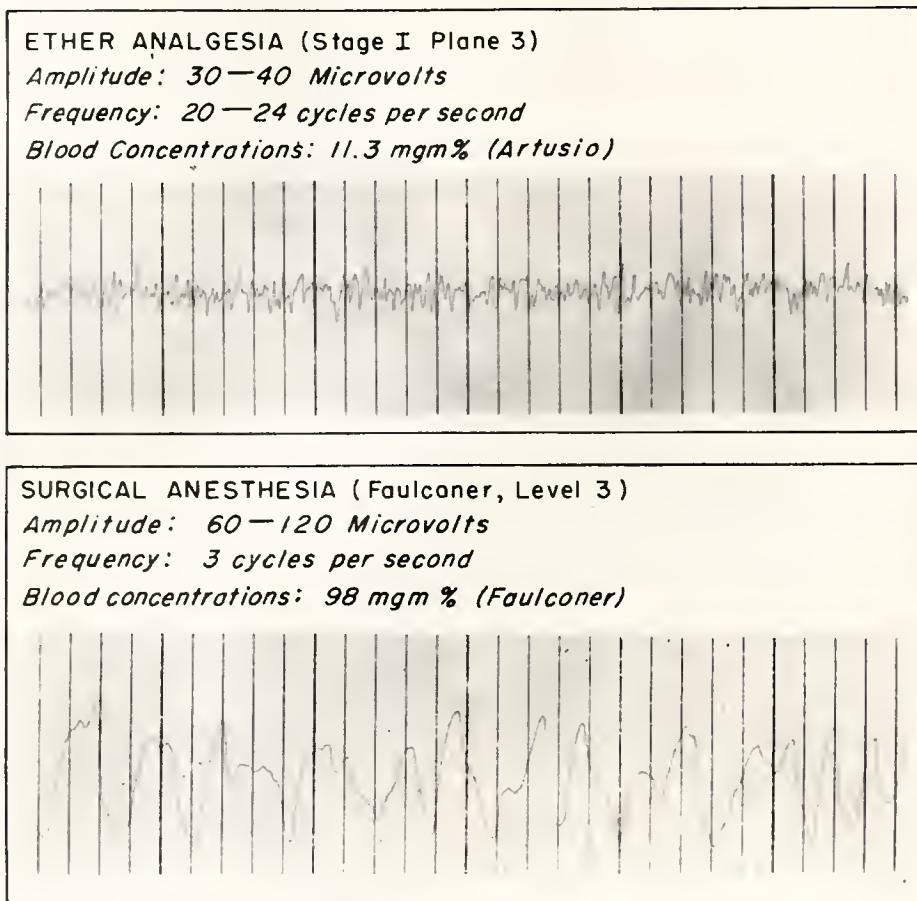


Figure 4A and B

with other agents. The neuromuscular blockade produced by decamethonium and succinylcholine is not enhanced by ether. This suggests that the action of curare and ether at the neuromuscular junction is similar. Recent investigation, however, has produced some evidence that the two types of blockade are not identical⁽⁷⁾.

Convulsions: Certain factors usually contribute to the so-called ether convulsions. These factors are toxicity in a child who has been premedicated with atropine and anesthetized with ether in the presence of a high endogenous and exogenous temperature. This leads to an elevation of the metabolic rate, producing a high output of carbon dioxide which is inadequately eliminated and a high oxygen demand which is inadequately supplied. Thus the stage is set for a convulsion.

A neuromuscular phenomenon characterized by abnormal motor movements has been observed in association with divinyl ether which is the result of stimulation of the subcortical and spinal motor centers. In dogs this is manifested by a so-called running movement which disappears if the drug is discontinued immediately and 100 per cent oxygen is administered.

Effects on the respiratory system

Ether exerts on the medullary respiratory center a dual action consisting of direct depression and reflex stimulation. The predominance of one effect over the other is determined by the depth of anesthesia. The reflex stimulation of the respiratory center is due largely to the stimulating effect of mobilized epinephrine, the sensitization of pulmonary stretch receptors, and the stimulation of extrapulmonary sensory re-

ceptors⁽⁸⁾. The development of metabolic acidosis will also produce reflex stimulation of the respiratory center through the chemoreceptors of the carotid and aortic bodies. The final effect on alveolar ventilation is the result of the interaction of reflex stimulation and direct depression of the respiratory center, together with the alterations produced on neuromuscular conduction and the reactivity of the respiratory muscles.

The salivary and mucous glands are stimulated during induction and depressed during maintenance. The secretions develop mostly in the upper respiratory tract where the salivary and mucous glands are more abundant. Premedication with anticholinergic drugs and induction with thiobarbiturates will reduce this secretory activity.

Frequently reference is incorrectly made to the irritating actions of ether on the lungs. No cytologic changes can be demonstrated in the mucous membranes of the bronchioles or alveoli following ether anesthesia. Pulmonary edema, pneumonitis, or the activation of latent tuberculosis is not due to a direct effect of ether.

Ether is a bronchodilator and is thus a beneficial anesthetic agent for the patient with bronchial asthma. The bronchodilatation results from the combined effect of direct depression of smooth muscle and to reflex sympathoadrenal release.

Central cardiac effects

In 1927, Blalock⁽⁹⁾ demonstrated that ether anesthesia in the dog is associated with an increase cardiac output. From further studies he concluded that the increased cardiac output was due to a direct myocardial stimulation by ether⁽¹⁰⁾. This incorrect interpretation has remained unchallenged until recently. Fisher and his associates⁽¹¹⁾, in 1951, demonstrated that ether acts as a direct myocardial depressant in the heart-lung preparations of dogs. Brewster and Issacs⁽²⁾, in 1953, discovered that the increased cardiac output in the dog was due to the reflex release of nor-epinephrine and epinephrine.

Thus the safety of the action of ether upon the myocardium is determined by the quantitative reflex release of epinephrine and nor-epinephrine from the adrenal medulla and sympathetic nerve endings, which by virtue of their positive inotropic effect

upon the myocardium antagonize the direct myocardial depression or negative inotropic effect of diethyl ether.

The clinical significance of this myocardial effect is that critical myocardial depression associated with profound hypotension may result from the direct depressant effect of diethyl ether upon the myocardium of a patient in whom the reflex release of epinephrine and nor-epinephrine from the adrenal medulla and sympathetic nerve endings is reduced or abolished.

The danger of critical myocardial depression during ether anesthesia is present in the following situations:

1. Drugs
 - a. Antihypertensive therapy with veratrum alkaloids, Rauwolfia preparations, hydralazine, and hexamethonium
 - b. Chlorpromazine
2. Spinal anesthesia supplemented with ether when sympathetic blockade is still present.
3. Surgical adrenalectomy or thoracolumbar sympathectomy
4. Pathologic hypofunction of the adrenal medulla
 - a. Addison's disease
 - b. Cushing's syndrome
 - c. Adrenogenital syndrome
5. Subnormal sympathoadrenal release
6. Decreased response of a diseased myocardium to the positive inotropic effect of epinephrine.

During induction the cardiac rate is increased mainly because of the release of epinephrine. Ether does not sensitize the cardiac conducting tissue to epinephrine and related sympathomimetic amines. Spontaneous arrhythmias are uncommon during ether anesthesia when adequate alveolar ventilation is maintained. When they do occur, they are supraventricular in origin. Continuous electrocardiographic recording during ether analgesia for cardiac surgery has not revealed any myocardial irritability except during direct cardiac manipulation.

Peripherovascular effects

Two mechanisms are involved in the peripheral vasodilatation produced by ether: (1) depression of the vasomotor center, and (2) direct depression of the smooth muscle of the blood vessels. Hershey

and Zweifach⁽¹³⁾ have shown that during hemorrhage ether predisposed the peripheral vascular compensatory mechanisms to early and extensive deterioration, decreased the tolerance to hemorrhage, diminished the response to blood transfusion, and modified the peripheral vascular reactivity to vasoconstrictor drugs.

Effects on the blood

The hemoconcentration observed during ether anesthesia is due to the combined effects of a reduction in plasma volume and the reflex sympathetic effect of splenic contraction. There is an increase in the flow of lymph which is probably indicative of the transfer of fluid from vascular to extravascular compartments.

Effects on the gastrointestinal system

Gastrointestinal tone, motility, and secretory activity are diminished or completely inhibited during ether anesthesia. This is due to the direct depression of the smooth muscle of the gastrointestinal tract and reflex sympathoadrenal release.

The high incidence of nausea and vomiting attributed to ether anesthesia by both the layman and medical profession has been unfounded. Often this is chiefly due to faulty and improper administration of the agent, hypoxia during or following operation, the operative procedure, and narcotic drugs used for premedication or postoperative pain relief. Waters⁽¹⁴⁾, in 1936, reported an incidence of 57 per cent with ether. Stephen⁽¹⁵⁾, in 1954, using modern anesthetic techniques to administer ether, reported an incidence of 38.5 per cent without Mareline, and 25.8 per cent with Mareline. A study of nausea and vomiting in patients undergoing cardiac surgery with hypnotic doses of thiopental for induction and analgesic concentrations of ether for maintenance revealed an incidence of 4.2 per cent (table 2).

Metabolic effects

As a result of the improvements in anesthetic techniques and biochemical investigation, many of the older views concerning the metabolic effects of ether need modification. Also, much of the biochemical investigation of the metabolic effects of ether were done in animals and the results are not always transferable to man. The reflex sympathoadrenal stimulus by diethyl

Table 2
Comparative Incidence of Postoperative Vomiting with Ether

	Per Cent
Waters (1936)	57
Stephen (1954)	38.5
Stephen (1954) with mareline	25.8
Ether analgesia for cardiac surgery	4.2

ether anesthesia produced hyperglycemia by glycogenolysis. If the nerves to the suprarenal glands are blocked by spinal or epidural anesthesia, hyperglycemia and metabolic acidosis are not produced. Thus the metabolic acidosis is also secondary to reflex sympathoadrenal release⁽¹⁶⁾. Pentobarbital and thiopental also inhibit the production of hyperglycemia by ether⁽¹⁷⁾.

Disturbances in acid-base equilibrium are usually due to alterations in ventilation. In the adult human, the proper administration of ether with adequate alveolar ventilation does not cause metabolic acidosis⁽¹⁸⁾. In most infants and many children, however, a moderate degree of metabolic acidosis develops largely because of an increase in the blood lactic acid⁽¹⁹⁾.

Thus a modification in our attitude toward the administration of ether to the diabetic patient is required. All that is really necessary in the management of the diabetic patient during surgery is to administer adequate insulin and glucose to maintain carbohydrate metabolism without producing hypoglycemia. The type of anesthetic agent used is far less important than its proper administration.

Liver function: There is a transient depression of liver function and the secretion of bile and bile salts during ether anesthesia. Clinical experience, however, seems to indicate that anesthesia *per se* when conducted with ether does not seriously influence the course of liver disease unless the exposure is excessive and is associated with hypoxemia. A well conducted anesthesia, with the maintenance of adequate tissue oxygenation and blood pressure, is more important than the effect of ether in preventing liver damage. The protective action of oxygen compares favorably with that of a high carbohydrate diet prior to anesthesia.

Effects on renal function

Ether anesthesia is accompanied by a suppression of urine formation and a compensatory polyuria during recovery. Fol-

lowing induction of anesthesia there is a marked reduction of the glomerular filtration rate, the effective renal plasma flow, and the output of water and electrolytes. The fall in filtration is usually less marked than that in effective renal plasma flow, so that the filtration fraction rises⁽²⁰⁾. Since these alterations of renal function are associated with either no change or a slight increase in the arterial pressure, a marked intrarenal vasoconstriction must occur, presumably affecting both afferent and efferent arterioles. The output of water and electrolytes decreases more than the filtration, indicating a relative augmentation of tubular reabsorption. The increased tubular reabsorption is due to the stimulation of the supraoptic-hypophyseal system and the release of the anti-diuretic hormone from the posterior pituitary gland. These effects on renal function are not specific for ether anesthesia, but seem to be associated with the state of general anesthesia regardless of the anesthetic agent used. Although urinary output is temporarily suppressed, no specific cytologic changes can be demonstrated in the renal parenchyma. The effect is purely functional.

Effects on uterine activity

Ether inhibits uterine activity and in deep planes causes marked uterine muscular relaxation. It passes through the placenta to narcotize the fetus. When used to supplement the less potent anesthetic gases, ethylene and nitrous oxide, minimal concentrations can be used without producing the deleterious effects seen with ether alone.

Divinyl Ether

Divinyl ether is often referred to as a hybrid of ether and ethylene because chemically it is similar to both. It is four times as potent as diethyl ether. Induction and recovery are rapid, and the postoperative period is relatively free of nausea and vomiting. During induction the salivary and mucous glands are strongly stimulated. The production of copious secretions may prove troublesome if the patient has not been premedicated with atropine. Divinyl ether is also a bronchodilator. Repeated or prolonged administration produces necrosis of the liver of the central lobular type. This effect is enhanced by coexisting hypoxia. The eye signs are not reliable in assessing

the depth of anesthesia. Eyeball activity may be active in the presence of good muscular relaxation.

Divinyl ether is useful to facilitate the induction of diethyl ether by the open drop technique and to fortify the analgesia of nitrous oxide and ethylene by the semi-closed method. It also can be used for minor surgical procedures, but should not be used longer than 30 minutes because of its hepatotoxic properties.

Ethyl Chloride

Ethyl chloride is a halogenated hydrocarbon with pharmacologic properties similar to chloroform. Its rapid, pleasant induction is the only feature which has sustained its popularity. Its safety margin is small, owing to its extreme potency and volatility. Initial vagal stimulation with bradycardia makes premedication with atropine essential. As anesthesia deepens, cardiac output is decreased by direct myocardial depression. Myocardial irritability is enhanced. The cardiac conducting tissue is sensitized to epinephrine and related sympathomimetic amines. Ventricular fibrillation may be produced by this combination. With many safer anesthetic agents available, its use as an inhalational anesthetic is not justified.

The use of ethyl chloride to produce local anesthetic effects by refrigeration has been unsatisfactory. Not only does destruction of healthy tissue sometimes occur, but pain is often experienced when the tissue is incised. As a local analgesic, ethyl chloride leaves much to be desired.

Balanced Pharmacologic Anesthesia

The anesthetic state can be broken down into three components: hypnosis, analgesia, and muscular relaxation. Drugs should be employed to produce each of these components for which their pharmacologic properties are primarily suited. Thus hypnosis can be accomplished with the thiobarbiturates, analgesia with ether, and muscular relaxation with the neuromuscular blocking agents. Attempts to produce these three components with ether alone will inevitably result in unnecessary depression of important physiologic mechanisms. Thus the administration of ether in analgesic concentrations, preceded by hypnotic doses of thiobarbiturates for induction and supplemented with a neuromuscular blocking

Table 3
Components of Supplemented
Ether Anesthesia

Thiobarbiturates	>	Hypnosis
Ether	>	Analgesia
Muscle relaxants	>	Relaxation
Equals anesthesia with few side effects		

agent for muscular relaxation associated with the maintenance of adequate alveolar ventilation, will prevent many of the deleterious side effects seen with ether alone (table 3).

Conclusion

The judgment and skill of the anesthesiologist are more significant than the anesthetic agent employed. In the past too much emphasis has been placed on individual agents in trying to explain the etiology of anesthetic complications. A patent airway, adequate tissue oxygenation, and carbon dioxide elimination accompanied by the application of sound physiologic and pharmacologic principles are the basic underlying requirements in the management of any patient during anesthesia and surgery. With the advent of medical anesthesia associated with improved biochemical investigational methods and more extensive research in anesthesia, many of the untoward side effects attributed to ether and other agents have been shown to be directly related to faulty and improper administration. It is not the automobile that kills, but the man behind the wheel.

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In 1900, a boy baby born in the United State could look forward on the average of 46.3 years of life. A girl born that year could expect to live an average of two more years, or a total of 48.3 years. By 1954, largely because of the elimination of the deaths from infectious diseases in infancy and childhood, males could expect to live 66.8 years. However, a female child born in 1954 could expect to live 72.9 years, an expectancy of six more years than the male. Bond, J. O.: *The Fragile Male*, *Geriatrics* 12:489 (Aug.) 1957.

The Effect of Potassium Depletion on the Kidneys

WALTER HOLLANDER, JR., M.D.

CHAPEL HILL

It has been known since 1937⁽¹⁾ that experimental potassium depletion in animals is frequently associated with anatomic lesions in the renal tubules, and during the last decade there have been a number of reports of renal tubular lesions in patients dying during or following a period of potassium deficiency⁽²⁾. Prior to 1953, however, little attention was paid to the possibility that potassium depletion in human beings might cause significant derangement of renal function, although there were occasional reports noting polyuria and polydipsia in such patients.

Reports from the Literature

In 1953⁽³⁾ and 1956⁽²⁾ Schwartz and Relman of Boston published their excellent studies with respect to renal function and histology in potassium-depleted patients. Table 1 summarizes some of their data. Potassium deficiency developed in patients nos. 1 and 5 as a result of chronic diarrhea. The second, third, and fourth patients were all women who had taken excessive amounts of laxatives for many years. The letter "A" refers to data obtained at the time the patients were known to be potassium-depleted; the letter "B" refers to studies done subsequent to potassium repletion. The interval between A and B is indicated in the second column. It will be noted that some but not all of these patients had albuminuria, some but not all had slight elevations of the blood urea nitrogen or nonprotein nitrogen, some but not all had abnormalities (usually slight) of the urinary sediment. All the patients had a significant impairment of urinary concentrating power. The phenol red excretion was measured in only 4 of the 5 cases, but in all these it was diminished. After potassium repletion, all the abnormalities returned to or toward normal, and in 4 of the 5 the interval was only two to three months. In cases 1 and 3, the authors obtained renal biopsies during potassium depletion and again after potassium repletion. Tubular lesions were evident at the

time of potassium depletion and were thought to be mainly in the proximal convoluted tubules. The biopsies performed after repletion showed evidence of repair.

Table 2 contains some of the available data from the literature with respect to urinary findings and renal function in potassium-depleted patients⁽⁴⁾. This summary includes cases of potassium deficiency arising from various causes, and almost all are examples of probable rather than rigidly proved forms of this condition. Hypokalemia was present in all, and in the majority there was some likely cause for excessive loss of potassium from the body. It is important to point out, however, that factors other than potassium depletion could have contributed to renal abnormalities in all these cases, and hence they cannot be taken as conclusive evidence for the effect of potassium deficiency alone. Thus chronic diarrhea may have been associated with deficiencies of many factors in addition to potassium, and primary hyperaldosteronism is generally associated with significant hypertension. To a lesser degree, the same qualification applies to the 5 cases of Relman and Schwartz, and unfortunately the few studies of relatively pure experimental potassium depletion in humans which have been reported do not provide much data with respect to functional or anatomic effects on the kidney.

As in the cases of Relman and Schwartz^(2,3), the most consistent abnormality in this random group of potassium-depleted patients is an impairment of the urinary concentrating mechanism, which was evident in all but one of those tested. Albuminuria was present in most but not all of the cases. The urinary sediment was abnormal (usually to a slight degree) in most but not all cases. The blood urea nitrogen or nonprotein nitrogen was elevated in some but by no means all of the cases, and was almost never extremely high.

Cases Studied at North Carolina Memorial Hospital

The last 4 cases represent patients with severe potassium depletion whom we have

Table 1
Evidences of Renal Damage in Potassium Depletion and After Potassium Repletion

Case	Interval (Months)	Albuminuria		Abnormal Urinary Sediment		B.U.N. Mg. per 100		Maxium Specific Gravity		15 Min. P.S.P. % Excreted		Glomerular Filtration Rate C-IN ml./min.		Effective Renal Plasma Flow C-PAH ml./min.	
		A—>B	A	B	A	B	A	B	A	B	A	B	A	B	A
1	18 mos.	No	No	No	No	—	—	1.005	1.022	12	26	64	—	247	—
2	2 mos.	Yes	No	Yes	Slight	27	13	1.005	1.021	16	30	43	103	315	584
3	3 mos.	No	No	No	No	15	—	1.011	1.020	9	24	51	63	362	307
4	3 mos.	Yes	?	No	No	16	—	1.013	1.026	—	—	103	116	379	507
5	2 mos.	Yes	No	Slight	No	NPN	NPN	1.008	1.023	3	21	43	80	88	407
=45 =35															

Table 2

EVIDENCES OF RENAL DAMAGE IN POTASSIUM DEPLETION

CASE	CAUSE OF K DEPLETION	SERUM K mEq./L	ALBUMINURIA	URINARY SEDIMENT	URINARY CONCENTRATING ABILITY	B.U.N OR N.P.N	P.S.P EXCRETION
Williams and MacMahon (1947)	Chronic Diarrhea	2.9	Yes	Granular Casts	—	Elevated	—
Luft et al (1951)	Idiopathic (Adrenal adenoma)	2.9	Intermittent	Occasional Wbc and Rbc	Impaired 1.011	—	—
Luft et al (1951)	Idiopathic	2.0	No	Wbc and Rbc	—	Normal	—
Keye (1952)	Steatorrhea	<1.3	Yes	Rbc and Granular Casts	[1.000 on Admission]	Elevated	—
Wyngaarden et al (1954)	Excessive Urinary Losses— ? Cause	2.6	Yes	Many Rbc Occasional Casts	Impaired 1.011	Elevated	—
Evans and Milne (1954)	Aldosteronism	1.4	Yes	Occasional Rbc and Wbc	Impaired 1.011	Normal → Elevated	—
Mader and Iseri (1955)	Aldosteronism	1.6	Trace	Normal	Impaired 1.010	Normal	—
Foye and Feichtmeir (1955)	Aldosteronism	1.8	Trace	Normal	Impaired 1.009	Normal	—
Cann and Louis (1956)	Aldosteronism	1.6	Trace	Normal	Impaired 1.011	Normal	Normal
Holten and Petersen (1956)	Probably Aldosteronism	2.3	Yes	Occasional Rbc and Wbc	Impaired 1.018	Normal	—
Dustan, Corcoran and Page (1956)	Aldosteronism	2.8	Yes	Rbc Wbc	Impaired 1.016	[Normal C _M]	—
Ditto	Aldosteronism	2.4	Yes	Wbc	Impaired 1.013	[Normal C _M]	—
Ditto	Aldosteronism	1.8	Yes	Wbc	Impaired 1.011	[Normal C _M]	—
Fine et al (1957)	Aldosteronism	2.3	Trace	Occasional Wbc and Rbc	Normal 1.026	Elevated	—
N.P. N.C.M.H. #2-40-08	Diarrhea and Pregnancy	1.5	No	[Infection]	Impaired 1.005	Elevated	Impaired
N.W. N.C.M.H. #4-74-49	Chronic Laxatives	2.1	No	Occasional Wbc	Impaired 1.006	Normal	Normal
S.V. N.C.M.H. #3-46-54	Chronic Laxatives	1.9	Trace	Occasional Wbc	Impaired 1.010	Elevated	—
V.C. N.C.M.H. #2-53-39	Adrenal Hyperplasia	1.5	Trace	Few Wbc	Impaired 375 mOsm.	Normal	Normal

Table 3

Maximum Achievable Urinary Concentration of Potassium Depleted and Control Rats*

Duration of K-deficiency Weeks	Muscle K mM./100 Gm. f. f. s.		Concentration of Urine Milliosmolal	
	Control	K-deficiency	Control	K-deficiency
1	47.6	42.8	2550	2132
3	45.8	41.7	2545	1962
2	48.2	37.9	2636	1808
4	47.9	34.0	2516	1710
2-1/2	44.8	26.6	2491	990

*This table is based on data reported in more detail elsewhere

Studies of Potassium Depletion in the Rat

During the past several years a group of us in the Department of Medicine at the University of North Carolina has been studying the effect of experimental potassium depletion on the renal concentrating mechanism of the rat. These studies⁽⁵⁾ represent the joint efforts of Dr. Robert Winters, Dr. Frank Williams, Dr. John Bradley, Dr. Louis Welt, and I. In addition, the kidneys of these rats have been studied histologically and by microdissection by Dr. Jean Oliver of the Renal Research Unit in Summit, New Jersey. Potassium depletion was achieved by a potassium-free intake and supplemental sodium bicarbonate. Control rats received the same basic diet but with adequate amounts of potassium. The ability to form a concentrated urine was tested by collecting urine following an injection of vasopressin-in-oil. In table 3 the maximal concentration of the urine achieved by various groups of rats is compared to the concentration of potassium in fat-free muscle solids. The latter is considered to be an index of the severity of potassium depletion.

A separate control group was tested with each experimental group, and the concentrating ability of control rats was readily reproducible. It will be noted that with increasing degrees of potassium depletion there was a progressive decrease in the maximum urinary concentration achieved. On the basis of additional data, it has been possible to conclude that this defect of the renal concentrating mechanism cannot be explained by a deficiency of any known factor other than potassium, that it is not simply the result of general nutritional failure, and that it is related to the total concentration that the kidney can achieve rather than to the concentration of any one particular urinary solute.

As will be reported in the near future by

Dr. Jean Oliver, the most consistent anatomic lesion in the kidneys of these potassium-depleted rats is found in the collecting ducts. This appears to be a unique lesion and achieves added interest when considered in relation to the physiologic defect, since several recent lines of evidence suggest that at least part of the urinary concentrating mechanism is located in the collecting ducts.

Summary

There is now a substantial body of circumstantial evidence in human beings and experimental evidence in animals which implicates potassium depletion as a specific cause of functional and anatomic derangements of the kidney. The most consistent alteration of renal function in potassium-depleted patients appears to be an impairment of the capacity to produce a highly concentrated urine, although other functional abnormalities also occur. In rats, experimental potassium depletion leads to a progressive impairment of the renal concentrating mechanism and to what appears to be a unique anatomic lesion in the renal collecting ducts. It is possible that this collecting duct lesion and the impairment of the renal concentrating mechanism represent the primary effects of potassium depletion on the kidney, and that many or all of the other renal abnormalities which have been observed are subsequent and perhaps secondary developments.

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Thrombotic Thrombocytopenic Purpura

A Case and A Brief Review of the Literature

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The disease thrombotic thrombocytopenic purpura was first described by Moschovitz⁽¹⁾ in 1925, and given its name by Singer⁽²⁾ in 1947. Its outstanding feature is the appearance of innumerable occlusions of small caliber arteries, arterioles, and capillaries by an amorphous or granular acidophilic material⁽³⁾. The clinical manifestations form an unusual triad; thrombocytopenic purpura, hemolytic anemia, and transitory bizarre neurologic symptoms and signs. Owing to the increasing number of cases reported in the literature, this entity can no longer be regarded as a medical curiosity. The following case, diagnosed *in vivo*, is presented because it is so characteristic of this disease.

Case Report

A 28 year old housewife was admitted to Moses H. Cone Hospital on May 5, 1954, because of jaundice. The patient had noted mild discomfort in the epigastrium for about one week before the onset of her present illness. Twenty-four hours before admission she suddenly became extremely nauseated, vomited once, became anorexic, had a severe headache, and noticed that her eyes were yellow.

Past history

In July, 1953, she was kept in bed for three weeks because of infectious hepatitis. In early childhood she and a younger brother had had attacks of jaundice at the same time.

Sixteen months before admission she had been delivered of a normal healthy child. She was extremely nauseated and had frequent nosebleeds throughout the entire pregnancy, but no jaundice. She was kept on a salt free diet during the pregnancy, although she did not think that she had anything wrong with her kidneys or an elevation of blood pressure.

The patient worked at a retail store and had

no contact with fumes or chemicals at her job. However, she had helped her father spray tobacco with some sort of chemical three days before the onset of her present illness. She did not recall any rats around her home, but she had a dog which had been placed in a veterinary hospital in December, 1953, with a diagnosis of pneumonia.

The history also revealed that the patient had had what was called "rabbit fever" on two occasions—once at the age of 18 years and again at 22. On each occasion she had broken out with skin lesions and had had some fever, but had not seen a physician. Dilatation and curettage had been done two or three years previously, and the pathologic report was negative. She was told five years before that she had pyuria, but there were no other gastrourinary symptoms. Her average weight was about 145 pounds, increasing up to 165 pounds since the birth of the baby. She had not used alcohol and had not been taking any form of medication recently. The only cleansing material she had used around the house was Ajax.

Physical examination

The patient was a well developed, well nourished, somewhat overweight young white woman who had definite icterus of the skin and sclerae and who appeared subacutely ill but was mentally alert. The temperature was 99.4 F., the pulse 80, weight 160 pounds, and blood pressure 134 systolic, 95 diastolic. There were four or five dime-sized contusions or purpuric spots over both legs and two similar lesions over the left arm. The lungs were clear to percussion and auscultation. There was no enlargement of the heart; the point of maximal impulse was felt in the fifth interspace inside the midclavicular line, the heart rate was 80, the rhythm regular, and no murmurs were heard. The liver and spleen could not be felt, but there was tenderness to palpation in the epigastrium and some tenderness in the left upper quadrant.

Laboratory data

On admission the red blood cell count was 4,280,000, the hemoglobin 71 per cent, the white

blood cell count 5,450, with 68 per cent polymorphonuclears and 32 lymphocytes. A specimen of urine was found to have a specific gravity of 1.012, an albumin determination of 3 plus, and was negative for sugar, acetone, bile and urobilinogen; microscopic examination of the urine revealed 40 to 50 red blood cells per high power field and 3 to 6 white blood cells. The icterus index was 34 units. The guaiac test was negative. The sedimentation rate was 34 corrected, the hematocrit 32, and prothrombin 100 per cent.

Clinical course

It was first thought that the patient had infectious hepatitis, and she was placed on a high-protein, high-carbohydrate, moderate-fat diet, and on bed rest with bathroom privileges. She was given codeine and Empirin for headache. On the second hospital day nausea and vomiting developed. She was given 1,000 cc. of glucose and saline, and 1,000 cc. of glucose and water. A flat film of the abdomen showed a small calcification in the right pelvis and a similar but less obvious shadow over the left pelvis, which the radiologist felt were phleboliths. Agglutination tests for Weil's disease were done and found to be positive (1:00) for *Leptospira canicola* and *Lept. icterohaemorrhagiae*. A second urinalysis showed 4 plus albuminuria. The cephalin flocculation test was negative at 24 and 48 hours.

The jaundice became worse on the third hospital day, and the patient was started on ACTH, 10 units every six hours. On the fifth day she had improved, not having vomited in 36 hours, and wanted to go home. It was noted, however, that the number of small purpuric spots on her legs and hands had increased.

On the sixth hospital day the patient's hemoglobin suddenly dropped to 37 per cent and the red blood cell count to 2,000,000. She became semicomatose. An osmotic fragility test was entirely normal; a reticulocyte count was 12.4 per cent, and a platelet count was 20,000. The blood urea nitrogen was 38. A direct Coombs test was negative. She was given 500 cc. of O-positive whole blood immediately and an additional 1,000 cc. on the next day. A second platelet count was 22,000. The clotting time was 6 minutes and bleeding time 6 minutes, 30 seconds. The serum alkaline phosphate was 4.8 Bodansky units.

On the seventh day the patient became extremely irrational, began to pick at the bedclothes, and did not recognize members of the family. On the eighth day her respiration became rapid and grunting, and a flaccid paralysis of the left arm and transient paralysis of the right side of the face developed. In view of the above findings the diagnosis of thrombotic thrombocytopenic purpura was made, and she was started on cortisone, 25 mg. every four hours. Additional laboratory studies gave the following results: red blood cells, 2,050,000; hemoglobin, 37 per cent; white blood

cells 12,300, with 65 polymorphonuclears, 5 myelocytes, 10 juveniles, and 9 lymphocytes. Van den Bergh's test for serum bilirubin: total, 16.5 mg. per 100 cc. (direct, 3.8 mg.; indirect, 12.7 mg.). The urine was still negative for urobilinogen and bile.

On the tenth hospital day the patient was still delirious, running a temperature of 103 F., rectally, and was entirely unresponsive. She was given 1,000 cc. of whole blood the next day. She began to have convulsive seizures lasting from one to three minutes which were only partially controlled by paraldehyde. The patient continued to have a high fever, began to have more more frequent convulsions, and quietly expired at 4:40 A.M. on the twelfth hospital day.

Pathologic studies

At autopsy the body was that of a moderately well nourished, well developed white female. There was moderate icterus of the skin and sclerae. Petechiae were found over the entire body, and a few ecchymoses were found on the shins.

The heart weighed 325 Gm. There were many petechiae of the epicardium and ecchymoses of the auricular appendages. The liver weighed 1,750 Gm. The surface was smooth except for a slight gray thickening in scattered patches. There were a few petechiae beneath the scalp, and petechiae on the inner aspect of the dura. After the brain was fixed, a notable feature was the presence of petechiae in an irregular distribution.

There was a necrotizing arteriolitis, with numerous fresh and organizing hyaline and granular eosinophilic thrombi in the following organs: skeletal muscle, myocardium, liver, stomach, adrenals, kidneys, pons, and vertebral marrow.

Review of the Literature

Many terms, have been employed to describe this disease, and, although none are entirely satisfactory, Singer's⁽²⁾ designation, "thrombotic thrombocytopenic purpura," is the most common and apparently is accepted at the present time. It does not emphasize, however, the hemolytic anemia as an essential feature of the disease, and Adelson⁽⁴⁾ suggests thrombolytic thrombocytopenic purpura as a better descriptive term.

Etiology

Little is known about the causative mechanisms underlying this disease. The original "platelet thromboses" hypothesis, assuming that the occlusions were composed exclusively of platelets, has been discarded⁽⁵⁾. It is now established that the occlusions are not merely due to agglutinated platelets, that the vascular wall is probably affected, and that the anemia is caused by

an extracorporeal hemolytic mechanism which also damages transfused red cells at a rapid rate⁽³⁾. Hyersensitivity mechanisms have been considered but not proved.

Pathology

Histologically, the condition is marked by multiple hyaline thrombi throughout the small arteries, arterioles, and capillaries in most of the organs of the body—most commonly the myocardium, the capsular zone of the adrenals, the renal cortex, the pancreas, and the brain, where they are confined almost exclusively to the gray matter⁽³⁾. By various staining techniques it has been shown that the thrombi show the same staining reactions as do the platelets. It is believed but not proved that the thrombotic material is partially made up of agglutinated platelets⁽⁶⁾.

Opinions differ as to whether a primary vascular lesion occurs first, followed by an occlusion of the vessel with agglutinated platelets. Most of the evidence, although not conclusive, favors a destructive lesion of the vascular wall of the small blood vessels, followed by dilatation of the vessel, then thrombosis⁽⁷⁾. It is believed that whatever causes the underlying process, it is repetitive, and that the lesions occur in crops⁽⁸⁾.

At autopsy petechiae and ecchymoses are seen in various organs. Many pathologists have found lesions of polyarthritis and/or lupus and disseminated platelet thrombosis in patients, and suggested that thrombotic purpura may belong to the collagen group of diseases⁽⁹⁾.

Symptoms and Signs

There are two recognized forms of the disease: an acute form, which is fatal within a few days to a few weeks; a chronic form, with relapses, lasting for several months and ending in an acute exacerbation.

In the acute form all the signs and symptoms in any thrombocytopenic purpura, such as petechiae, ecchymoses of the skin, and bleeding from all body orifices, may be seen. Other signs usually present are prolonged bleeding time, positive tourniquet test, and poor clot retraction. Some patients have thrombocytopenia, but only slight or no purpura. Many give a history of upper respiratory infection preceding the illness. Dizziness, nausea, vomiting, headache, ma-

laise, anorexia, and a temperature ranging from 100 to 102 F. are usual complaints. Manifest or latent jaundice of the acholuric, hemolytic type is present. Bilirubinuria is not found. The liver and spleen are moderately enlarged in about half of the patients, microscopic hematuria is almost always found, and nephritis has been encountered. Almost all the patients have some mental symptoms. They may have confusion, irritability, delirium, stupor, or coma. These symptoms are generally transitory and are followed by lucid intervals. Vertigo, facial weakness, hemiplegia, ptosis, and dysphagia are focal signs that may be present⁽³⁾.

An unusual laboratory finding not found in any other type of spherocytic hemolytic anemia is intermittent spherocytosis. Intermittent increase in osmotic fragility occurs. The Coombs test, which demonstrates the presence of a globulin coat on the surface of red cells, is generally negative; however, in a recent case reported by Ambrosius⁽¹⁰⁾ this test was positive. The leukocyte count is normal or slightly elevated. A leukemoid reaction with immature granulocytes has been observed. Platelet counts are almost always low⁽³⁾.

Random muscle biopsies are not supposed to be helpful, but in the case presented all specimens taken at random *post mortem* showed typical lesions. The bone marrow shows a nonspecific pattern, but a hyperplastic marrow is generally found present⁽³⁾. Cooper⁽¹¹⁾ found that the best way to demonstrate the lesions by sternal marrow sections was to use paraffin section of marrow.

Only a few cases of chronic intermittent thrombotic purpura have been reported; one patient lived two and one half years and one nine months, both having had splenectomy⁽³⁾.

Treatment

From the standpoint of treatment, splenectomy has been purely empirical and used only in a few patients because of lack of diagnosis. Splenectomy has been performed in 9 patients: in 7 no effect was noticeable; the other 2 had only temporary remissions. ACTH and cortisone have been used in most instances with poor results. Platelet transfusions are probably of no value, since the platelets are rapidly removed from the circulation in thrombotic purpura. Anticoagulants are valueless and dangerous. Blood transfusions maintain life but usually cannot

elevate the red cell level for any length of time owing to the extracorporeal hemolytic mechanism⁽³⁾.

Summary

A case of thrombotic thrombocytopenic purpura and a brief summary of available knowledge on the subject are presented.

The diagnosis of thrombotic thrombocytopenic purpura should be suspected in any patient presenting the triad of thrombocytopenic purpura, hemolytic anemia, and bizarre neurologic signs and symptoms.

Muscle biopsy at random, as demonstrated in this case, may contribute to diagnosis.

The necrotizing arteriolitis so prominent in this case lends support to the theory that small blood vessels are primarily affected first by some causative agent in this disease.

Acknowledgement

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Serial esophagoscopy evaluations, with portal pressure determinations in some cases, were made of the esophageal varices of 133 patients with biopsy-proved cirrhosis over an average period of 32.6 weeks. It was found that the varices were notably variable in diameter and extent from time to time, with only the slightest tendency to improve as the general clinical course improved and to worsen as the clinical course worsened. The fluctuations demonstrated some degree of increasing stability as the varices became larger and more extensive. There was no correlation between the apparent duration of the cirrhosis and either varix severity or stability. In a quarter of the patients, at least, one of the examinations showed that the varices had disappeared, but this proved to be temporary disappearance whenever the subsequent course could be adequately followed. In some patients varices disappeared and reappeared very rapidly, these changes being usually without relationship to changes in the general clinical state. The level of the portal venous pressure showed no correlation with the diameter or extent of the varices, and could not be estimated even roughly from the esophagoscopy appearances. The pressure, like varix severity, varied considerably from time to time, without relation to changes in the clinical picture. In the individual patient, however, it was found that varices did not become smaller when the pressure rose or larger when it fell.—Palmer, E. D.: Esophageal Varices Secondary to Portal Cirrhosis, *Arch. Int. Med.* 47:25 (July) 1957.

Clinical Note: Adult Death from Salicylate Poisoning

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and

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Salicylates, particularly acetyl salicylic acid (aspirin) have been family medicinal landmarks for so long that we have lost fear of the familiar and seldom regard these agents as dangerous. It takes time, however, for children to learn about the contents of medicine cabinets, so that cases of salicylate poisoning in children are relatively frequent⁽¹⁾. Accidental ingestion, dosage errors, and the large doses employed in treating rheumatic disease may produce intoxication in children; rarely dermal absorption of methyl salicylates and hypersensitivity are means of poisoning. The clinical picture of salicylism in children then should be well recognized. In adults the problem is much less common, although rheumatologists have more than passing acquaintance with the milder manifestations. Occasionally salicylates are used in suicide attempts; because a recent such attempt succeeded, it is thought appropriate to review briefly the clinical picture of salicylate poisoning.

Case Report

The patient, a 33 year old married mother of three young children, took an estimated 30 Gm. of acetyl salicylic acid and undetermined amounts of Bufferin* and meprobamate at about 8:00 A.M. on the day of admission. Shortly thereafter she slashed both wrists. After these lacerations were repaired, she was sent to us for psychiatric evaluation. Except for signs of depression, she was not uncomfortable until about three hours after ingestion, when she vomited profusely five or six times. En route she became stuporous and on arrival

was admitted for treatment about eight hours after salicylate ingestion.

Admission blood pressure was 130 systolic, 50 diastolic, pulse rate 120, respiratory rate 44, rectal temperature 106 F. The patient was comatose and considered moribund on admission; her skin was hot and sweaty while her respiratory excursions were rapid and deep. Shortly after admission she had a generalized convulsion and died. Limited laboratory studies included a carbon dioxide combining power of 11 milliequivalents per liter and a serum salicylate level of 117 mg. per 100 cc.

Comment

After ingestion salicylates can be measured in the blood within 30 minutes, peak levels which persist for four to six hours being obtained within two hours. From 50 to 80 per cent of the ingested dose is bound by protein with the unbound fraction, increasing with total dosage. Of the 70 to 80 per cent of a given dose excreted by the kidney, one half is excreted after 24 hours, with traces being present even at 48 hours⁽²⁾.

At usual doses of 0.3 to 0.6 Gm. every four hours, symptoms are usually minimal if present. At the therapeutic level of 30 to 50 mg. per 100 cc. a variety of manifestations which disappear promptly when the drug is discontinued may occur—headaches, dizziness, tinnitus, deafness, blurred vision, nausea, and vomiting. When a serum salicylate of 50 mg. per 100 cc. is reached, hyperventilation develops and with increasing levels increased agitation, garrulousness, tremor, seizures, coma, and occasionally as in this case death occurs⁽²⁾.

If poisoning is not severe, treatment is simple: supportive measures and withdrawal of the drug or decrease in dosage if symptoms develop during salicylate therapy. With more serious cases, problems multiply algebraically. One of the early toxic mani-

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†From the Department of Psychiatry, Bowman Gray School of Medicine of Wake Forest College, Winston-Salem.

*Bufferin-Acetyl salicylic acid with aluminum glycinate and magnesium carbonate.

festations is hyperventilation, which develops because of stimulation of the medullary respiratory centers by the drug and which leads to a respiratory alkalosis⁽³⁾. Ordinarily respiratory alkalosis such as seen in hysterical episodes responds to carbon dioxide inhalation, usually rebreathing into a convenient paper bag. In salicylate poisoning the metabolic derangement is much more complex⁽¹⁰⁾. The central effect is followed by a peripheral action, with an increase in oxygen consumption, fever, metabolic acidosis, and at times hyperglycemia with glucosuria and ketonuria^(12,14). Urine pH does not correlate satisfactorily with the blood pH, while carbon dioxide combining power is depressed in both respiratory alkalosis and metabolic acidosis; serum chloride is usually elevated in both conditions. Serial blood pH determinations then become a necessity in recognizing the stage of the process and in planning treatment. (Diabetic coma is easily ruled out in most instances because of the marked sweating and because the blood sugar is not increased as greatly in salicylate poisoning.)

When metabolic acidosis supervenes, adequate fluid balance and urine flow must be maintained. Intravenous sodium bicarbonate has been suggested at this stage, as has 1/6 molar sodium lactate. Since these solutions are alkaline, the blood pH should be known before administration so that alkalosis, if present, is not exaggerated by injudicious use. Because pH meters are not standard equipment in most hospitals, dextrose and saline solutions are safer in most cases. Oral sodium bicarbonate has been suggested, but this agent hastens the absorption of salicylate and should not be given before gastric lavage. Since some salicylate may remain in the stomach as late as eight hours after ingestion, the stomach should be lavaged routinely up to this time; normal saline seems preferable.

The use of carbon dioxide inhalation serves no purpose at any time, although oxygen may be effective in combatting hypoxia. Theoretically dialysis with an artificial kidney to remove salicylates⁽⁵⁾, exchange transfusions, and hypothermia are attractive; logistical problems make dialysis a conversation piece in most hospitals, while availability of blood usually limits exchange transfusions to children. Hypothermia by depressing the accelerated body

metabolism could conceivably allow more time for excretion of the offending agent, although no helpful data are available.

Not to belabor the obvious, but prevention is the best treatment. All drugs should be kept away from children and all dosages carefully checked by parent, patient, and physician. With adults intent on suicide, physicians should be aware that salicylates may be neither respectful nor friendly.

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The Medical Spectator

THE GREAT CHOLESTEROL CRISIS

Seen in historical perspective, the present cholesterol crisis takes on cultural aspects hardly glimpsed if one neglects such real and fictional characters as Ponce de Leon, Brown-Sequard, Dr. Brinkley, Faust, and Mr. Am. This quintet dramatizes man's struggle with aging and with ignorance, each member seeking or possessing the secret of life. For one the hope was geographical; another offered "glands" surgically, while the third suggested "glands" by mouth. Faust contracted with the Devil and Mr. Am with the Chicago Tribune-New York Daily News Syndicate. The least common denominator, or rather the most common trait displayed, has been wishful thinking.

Separating hope and fact has ever demanded rigorous thought, careful experiment, and reluctance to inhabit a world solely black and white. How economic factors, fashion, anxiety, and fear influence the epidemiology of drug consumption was touched on in the last issue. The great cholesterol crisis (hereinafter referred to

as GCC) offers an unparalleled opportunity to explore the bull market in medicines.

Certain elements of the GCC can be noted:

1. Hardening of the arteries is a manifestation of aging.

2. Most people do not think aging is a good thing even though other cultures have respected the aged and looked to the elderly for wisdom and sound advice.

3. Hardening of the arteries is characterized by intimal lipid changes.

4. Blood cholesterol measures a lipid.

5. There is a poorly defined relationship between hypercholesterolemia and atherosclerosis.

A ready conclusion after superficial study would be: lower the cholesterol and decrease the atherosclerosis. Many agents have been shown to decrease blood cholesterol; a partial list would include estrogens, thyroid substance, lecithin, sitosterol, niacin, alpha tocopherol, cornoil, safflower seed oil, cortisone, and corticotropin. Yet what changes in the internal environment are induced by lowering the cholesterol are even less understood than the role of cholesterol in the pathogenesis of atherosclerosis. An advertisement describing the virtues of a particular emulsion of unsaturated fatty acid and mixed tocopherols in lowering the blood cholesterol is not in itself fallacious; by leaving the unsaid unsaid the advertiser strongly intimates that this lowering is good and true.

This may well be good and true, but implying it doesn't make it so. The reason for this is our own ignorance of the pathogenesis of atherosclerosis. Nothing is said in the blurb referred to above of heredity, vessel wall anatomy, blood pressure, dietary fat and calories, sex, and that glorious catch-all factor—stress. We have again been reminded that fat and cholesterol are not synonymous and that the arterial wall can synthesize cholesterol from various substances⁽¹⁾.

We do not yet know when an atheroma-

tous lesion is irreversible, nor are we sure how essential essential fatty acids are. Recent evidence does suggest strongly that saturated fatty acids favor an acceleration of the atherosclerotic process. Clinical studies of populations who ingest greater quantities of unsaturated fatty acids of vegetable or marine origin and less saturated fatty acids (animal origin) do indicate less disease in the former groups^{(2)*}.

We still do not know what determines the site of an atheromatous plaque. Our understanding of the genetic factors at work is fuzzy at best, while our methods of defining the extent of the disease and its prognostic importance in human beings are woeful.

It cannot truthfully be said that a lowering of the serum cholesterol indicates arrest of the process, nor have we evidence that any hypocholesterolemic agent mobilizes intimal lipids and thereby improves arterial wall function in a manner analogous to the urate mobilizing effect of probenecid.

Certain conclusions do seem justified:

1. Cholesterol is somehow involved in the atherosclerotic process.

2. Blood cholesterol can be lowered.

3. Carefully controlled studies of morbidity and mortality over a long period of the use of hypocholesterolemic agents are necessary before any promise can be made to the general public.

These conclusions certainly do not justify the hoopla now being dispensed to induce the GCC. These conclusions do not contraindicate switching to skimmed milk; after all, a quart of skimmed milk is 8 to 10 cents cheaper than a quart of whole milk, besides containing less fat.

*Unsaturated fatty acids contain one or more carbon-carbon double bonds, while saturated fatty acids contain none, thereby being saturated in this respect.

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NOVEMBER, 1957

THIRD PARTY ENCROACHMENT

President Schoenheit's Message this month is so important that it is featured on the cover of this issue. In recognition of the increasing number of non-medical agencies involved in the private practice of medicine, the House of Delegates, at the last meeting of the State Society, voted to sponsor a Survey of Third Party Encroachment on the Private Practice of Medicine. Mr. Horace Cotton, who is well qualified by his long association with doctors, has been selected to direct the survey. In order for it to succeed, however, the surveyors will need the whole-hearted cooperation of the State Society members.

As stated in the President's Message, every member of the society will receive a form to be completed, giving his experience with third parties, and his opinion, pro or

con, about such encroachment. If the survey is to mean what it should, it is highly important that far more than the average proportion of these forms be returned. It is hoped that every member who reads this will do at least two things: (1) fill out his own form promptly; and (2) talk to as many of his colleagues as possible and remind them to do likewise.

* * *

POSTGRADUATE MEDICINE IN NORTH CAROLINA

Within the memory of our older members, the time was when a North Carolina doctor who felt the need of what Osler called a "brain dusting" had to go out of the state for postgraduate instruction. This was not only expensive, but the doctor had to leave his practice for the duration of the course. To meet this need of postgraduate training, the University of North Carolina 40 years ago sponsored a series of postgraduate courses that were the first of their kind in the nation. A visiting lecturer, in the fashion of a Methodist circuit rider, covered his territory every week, giving lectures to a different group of doctors, in a different town, every day. This plan enabled the doctors to get the equivalent of a week's intensive postgraduate training by giving up an afternoon a week. The idea has since been copied by a number of other states.

This program, in a modified form, is still in operation. Its forty-first year offers a six-week course in the First District on Wednesdays, beginning January 15, rotating between Ahoskie, Edenton, and Elizabeth City. One day later—January 16—a similar course, sponsored by the Wake County Medical Society in cooperation with the University of North Carolina School of Medicine, begins in Raleigh. The meetings will be held every Thursday.

In addition, the University of North Carolina is offering a symposium on November 21-22, at North Carolina Memorial Hospital. On February 7 the State Medical Society and the University of North Carolina Medical School will sponsor an Occupational Health Seminar.

Duke University offers every Thursday, at 10 A.M., a lecture by one of the services, followed by a clinicopathologic conference and medical staff rounds. The school will

offer also a postgraduate course in gastroenterology on February 10-14 and a course in rheumatology on March 10-11.

The Bowman Gray School of Medicine of Wake Forest College offers weekly on Monday nights at 7:30 P.M., a scientific speaker or clinicopathologic conference. It will also offer a postgraduate course in gastroenterology in March and another in obstetrics, gynecology, and pediatrics in April (specific dates to be announced later). The latter will be sponsored in cooperation with the Personal Health Division of the North Carolina State Board of Health.

While it is stimulating and instructive to attend one or two national or large regional meetings a year, it is no longer necessary to leave the state in order to keep up with medical advances.

* * *

STATE JOURNAL CONFERENCE

For many years it was customary for the editors of state medical journals and secretaries of the state medical societies to be guests of the American Medical Association at its headquarters in Chicago. A few years ago the State Medical Journal Advertising Bureau was reorganized as an autonomous organization, with offices outside the A.M.A. headquarters building. The value of the meeting of minds in the conferences was so great that it was decided to continue them under the sponsorship of the S.M.J.A.B., but to hold them only every two years, instead of annually, and to include business managers and associate editors, instead of state society secretaries. The conferences are still held in the auditorium of the A.M.A. headquarters, and the A.M.A. serves lunches on both days of the conference.

The third of these biennial conferences was held on Monday and Tuesday, October 28 and 29. The NORTH CAROLINA MEDICAL JOURNAL was represented by the editor and the business manager.

While the conference was devoted largely to the technical side of medical journalism, a summary of its high lights may be of interest to some of our readers. The chairman, Dr. Everett George, editor of the *Journal of the Iowa State Medical Society*, had arranged a program that was profitable to all present.

Since Secretary George Lull was away,

Dr. Julian Price, representing the Board of Trustees, took his place and gave the address of welcome. His was a very fitting selection, since he was for many years editor of the *South Carolina Medical Journal* and a former member of the Advisory Committee of the State Journal Advertising Bureau. His address, though brief, was marked by his characteristic combination of humor and philosophy.

Monday afternoon was devoted to two workshops: one, conducted by Mr. O. M. Forkert, on journal format and make-up; the other, conducted by Mr. Jackson, on advertising problems.

At the dinner Monday evening, at the Sheraton Hotel, the group relaxed and enjoyed a humorous address by Mr. Carl F. Conway, a lawyer of Osage, Ohio.

Tuesday morning was devoted to a panel discussion of the various problems of medical journals. Members of the panel were Dr. Joseph Garland, editor of the *New England Journal of Medicine*; Mr. Alex H. Stewart, managing editor of the *Pennsylvania Medical Journal*; and Mr. Alfred Jackson. Dr. Stanley Weld, editor of the *Connecticut Medical Journal*, discussed the problems of the Advertising Committee of the Bureau. Dr. Lee Hill, of Des Moines, Iowa, told of the problems of the specialty journals, in contrast with the state journals. Tuesday afternoon was given over to Mr. Forkert for questions and answers.

Without disparaging any of the others on the program, Mr. C. M. Forkert was the star of the show. He knew every detail of the printing business and held the audience literally spellbound for two hours on Monday afternoon. On Tuesday morning he held an unscheduled round table discussion with those fortunate enough to arrive early, in which he offered numerous constructive criticisms of individual journals. During the lunch hour he resumed this discussion, and through the regular sessions he was ready with pertinent suggestions.

Mr. Forkert seemed never to tire; was never out of patience; and his keen sense of humor softened his criticisms, all which were taken with good grace by the individual editors. He said that there had been great improvement in all the state journals since the last conference two years ago, and that they had "made as much progress in a short time as any group I've ever known."

President's Message

THIRD PARTY ENCROACHMENT

There Can Be Only One Topic

... for my message this month. It is the topic which, I earnestly hope, is presently in the minds of all our members and under discussion wherever two or more North Carolina physicians are gathered together. It is the topic of Third Party Encroachment on the Private Practice of Medicine in our State. And let us realize that the subject is not occupying our thoughts alone. All over the United States doctors are realizing that the problem of the multitudinous agencies, organizations, firms, and individuals who interpose themselves between the physician and his patient is a problem to the solution of which the profession holds the key.

"Ripeness is all," said the Bard. Ripeness—ripeness for clear-sighted, factual study—is what this problem has. Recognizing this fact, we in North Carolina have voted to make this study before overripeness sets in, for we know that if we sit on our hands, waiting for the other fellow to do it, the fruit that finally falls will be bitter. The House of Delegates took a bold and imaginative decision when it voted to sponsor a Survey of Third Party Encroachment. We whom you have chosen as your Executive Council are ready to be bold and imaginative in framing recommendations for action based on the Survey's findings. But first we must have the findings. The basic material for them can come only from you. In the words of one of the great war leaders, "Give us the tools and we will finish the job."

Read again the definition of Third Party Encroachment sent to you by our surveyors: "Where any agency, organization, company or person intervenes between a private practitioner (*i.e.*, one rendering service for fees in his own right) and a patient, in such a manner as to deny the patient free choice of doctor, or the doctor free choice of patient, or to direct the doctor as to the management of the case, or to limit or influence the nature or extent of the doctor's professional services *by way of fee or otherwise*, there is encroachment."

Do we not all see that encroachment is everywhere? It steals up as silently as the

dawn. It is for us to see that it does not bathe us in the illusory radiance of a false dawn, followed by a blacker night than before. As Westbrook Murphy told us at Pinehurst last year, these third parties "have no souls, have no consciences, cannot exercise professional judgment, and are impersonally ruthless." No power of divination, no gift of second sight, no special prescience is required to see what is staring us in our professional face: Some day the third parties are going to form a Third Party, a combination to control medicine itself, to demote it from art to craft, and to downgrade us who profess it to those who supply it . . . gift-wrapped as directed.

I do not know, any more than you do, what the Survey findings will be. Nor do I know what recommendations your Executive Council will make (even *can* make) after it has studied whatever facts the Survey may turn up. There is no demand upon me to prophesy these things. But there is a demand upon me to insure, so far as I am able, that the seed we have sown shall germinate, that the Survey shall not perish from the inertia of those for whose benefit it was conceived.

Each member of the Medical Society of the State of North Carolina has or will soon receive a form to be completed in our efforts to compile the facts of Third Party Encroachment in North Carolina. Please do not disregard it: use it!

If, as an individual, you have experienced detrimental third party intervention, mail the facts to our surveyors. If, as an individual, you have a point of view to express (in defense of third parties, if you like), go ahead and use the report form for that purpose. If your local society has not yet had it discussion of third party encroachment, do what you can to push it along so that the collective voice of your medical community shall not go unheard. As President, as physician, as fellow man, I ask you to give your knowledge and wisdom in this truly worthwhile project.

E. W. SCHOENHEIT, M.D.
with
HORACE COTTON,
Director of Survey

CORRESPONDENCE

NORTH CAROLINA CANCER INSTITUTE

To the Editor:

I am writing to you in regard to certain information concerning the North Carolina Cancer Institute at Lumberton. At a meeting on September 15, of the Executive Committee of the Board of Trustees, they requested that I write to you concerning admission policies.

The institute is now licensed as a chronic disease hospital as you probably know. The major change is that in certain instances, where it is deemed advisable, various chemotherapeutic and hormone drugs may be administered to the patient with the hope of ameliorating the patient's condition. The important items we would like brought to the attention of the physicians are:

Item I: Only patients who are certified as indigent or medically indigent by their Welfare Department will be accepted in accordance with the wishes of the cancer committee of the State Medical Society.

Item II: Only patients who have proven cancer and who have already had the usual standard surgical and radiological therapies as indicated or who have been definitely judged to be beyond the stage where such treatment would be of benefit can be admitted.

Item III: There must be a request from the patient's attending physician for admission of the patient. This statement must certify that the patient has cancer proven by biopsy except in rare instances where the overwhelming evidence is in favor of cancer and the proof of such would require a major operation which would be detrimental to the patient's immediate life.

The North Carolina Cancer Institute wishes to be of service to those patients who are in need of its care, but does not wish to admit any patient whose attending physician does not feel that the patient rightfully belongs there.

Sincerely yours,

H. Max Schiebel, M.D., President
The Board of Trustees
North Carolina Cancer Institute

BULLETIN BOARD

COMING MEETINGS

North Carolina Board of Medical Examiners, meeting to interview candidates for licensure by endorsement—Mid Pines Hotel, Southern Pines, January 11.

University of North Carolina School of Medicine weekly postgraduate programs: First District Medical Society, alternating between Ahsoskie, Edenton, and Elizabeth City, beginning January 15 and continuing Wednesday afternoons and evenings through February 22; Raleigh, beginning January 16 and continuing Thursday afternoons and evenings through February 23.

Duke University Postgraduate Course in Gastroenterology—Durham, February 10-14.

Watts Hospital Symposium—Durham, February 12-13.

A.M.A. Eleventh Annual Clinical Meetings—Convention Hall, Philadelphia, December 3-6.

American College of Surgeons, Sectional Meetings, Jackson, Mississippi, January 16-18.

A.M.A. Industrial Health Congress—Milwaukee, Wisconsin, January 27-29.

Fifty-Fourth Annual Congress on Medical Education and Licensure—The Palmer House, Chicago, February 9-11.

NEW MEMBERS OF THE SOCIETY

The following new members joined the Medical Society of the State of North Carolina during the month of October, 1957:

Dr. Robert Paul Davis, UNC School of Medicine; Chapel Hill; Dr. Richard Lawrence Dobson, N. C. Memorial Hospital, Chapel Hill; Dr. Allan Watson Downie, N. C. Memorial Hospital, Chapel Hill; Dr. John Carroll Herion, Circle Drive, Dogwood Acres, Chapel Hill; Dr. Martin Harvey Keeler, N. C. Memorial Hospital, Chapel Hill; Dr. Cornelius Lansing, 309 Briarbridge Valley, Chapel Hill; Dr. Eugene William Loeser, Jr., 18 Audley Lane, Chapel Hill; Dr. Walter Coles Lusk, II, Box 3317, Duke Hospital, Durham; Dr. Richard Lee Murtland, UNC School of Medicine, Chapel Hill; Dr. Arthur Jergen Prange, Jr., Rt. 2, Sherwood Forest, Chapel Hill; Dr. Albert Jack Silverman, Duke Hospital, Durham.

Dr. John Lewis Simmons, UNC School of Medicine, Chapel Hill; Dr. William Jeffrey Wisor, Jr., N. C. Memorial Hospital, Chapel Hill; Dr. Daniel Test Young, 410 McCauley Street, Chapel Hill; Dr. William Glenn Young, Box 3617, Duke Hospital, Durham; Dr. Charles Granger Chapman, Mercy Hospital, Charlotte 5; Dr. Griffin Caswell Daughtridge, 526 Marigold Street, Rocky Mount; Dr. Irvin George Scherer, Union Grove; Dr. Gordon Cameron Crowell, 709 South Aspen Street, Lincolnton; Dr. James Francis Morris, 306 North

Taylor Street, Goldsboro; Dr. Talbot Fort Parker, Jr., 401 North Herman Street, Goldsboro; Dr. James Manning Walker, 15 East Jordan, Brevard.

Dr. Robert Donald Higgins, 1204 Cowper Drive, Raleigh; Dr. Jean Douglas McRee, Box 7573, State Hospital, Raleigh; Dr. John White Gainey, Jr., 105 North 10th Street, Morehead City; Dr. James Foster Crosby, 916 Bridle Path Lane, Charlotte; Dr. Alfred Schick, Mercy Hospital, Charlotte; Dr. Hervy Basil Kornegay, Jr., 323½ Grove Park Avenue, Winston-Salem; Dr. Paul Osman Howard, 550 Summitt Drive, Sanford; Dr. Alfred R. Cordell, Bowman Gray School of Medicine, Winston-Salem; Dr. Charles G. Gunn, Hanes Hosiery Mills, Winston-Salem; Dr. Charles C. Stamey, 720 West 5th Street, Winston-Salem; Dr. William C. Sugg, 625 Reynolds Building, Winston-Salem; Dr. Robert Key Arthur, Jr., 519½ North Main Street, High Point.

NEWS NOTES FROM THE

DUKE UNIVERSITY SCHOOL OF MEDICINE

Dr. E. C. Hamblen, Duke gynecologist and endocrinologist, has been invited to visit six countries during a three-month lecture and teaching tour. He will lecture and conduct postgraduate courses at the invitation of various Latin American universities and professional societies.

Highlight of the tour will be his appearance as a featured speaker for the seventh national meeting of the Chilean Society of Obstetrics and Gynecology, December 1-4 in Santiago, Chile. Also, he will conduct a three-week postgraduate course in gynecologic endocrinology at the University of Chile.

A Duke medical faculty member since 1931, Dr. Hamblen is a specialist in the field of reproductive endocrinology. He has written four books that include "Facts for Childless Couples" and "Facts About the Change of Life."

* * *

Weekly Tumor Conferences bringing together the various groups which manage neoplastic disease are being held each Wednesday at 11:30 a.m. in the new Surgical Private Diagnostic Clinic at Duke Hospital.

Discussions center in the management of individual patient problems, but reports on research and general experience are also planned.

* * *

Duke University has received two U. S. Public Health Service grants totaling some \$84,000 to expand and improve research laboratory facilities at the University's Medical Center.

One grant of \$42,000 will be used to expand the Center's tissue culture laboratory for study of tumor-producing viruses. The other grant, also worth \$42,000, will provide for the equipping of a new laboratory for physiological studies of pathogenic (disease causing) fungi.

Dr. Joseph W. Beard, professor of surgery and associate professor of virology, is the principal

investigator for tumor virus studies now under way at Duke. This work includes culture of leukemia cells and virus-induced tumors and study of factors that influence virus production by cells.

Dr. Leo Pine, assistant professor of microbiology, will be principal investigator for research in pathogenic fungi. Among areas of investigation will be the metabolic processes of pathogenic fungi and factors influencing their growth and ability to cause disease.

* * *

Leonard C. Small has been appointed administrative assistant at Duke Hospital, Superintendent F. Ross Porter announced recently.

He succeeds John M. McBryde, Jr., who resigned to accept a position as assistant superintendent of Good Samaritan Hospital in Lexington, Kentucky.

* * *

"Brain chilling" research that may open the way to new chemical treatment of cerebral tumors and also permit surgeons to conduct brain operations now considered impossible is under way here at the Duke University Medical Center.

Duke neurosurgeon Barnes Woodhall is director of the project, which centers around cooling the brain to a temperature at which virtually all brain activity ceases.

Dr. Woodhall and his associates have successfully lowered the brain temperature of dogs from a normal 100 to 50 F. They hope within a year to begin applying the process to human beings.

Key to the possibilities opened by this cooling process, known as cerebral hypothermia, is the fact that at such low temperature the brain's need for blood and oxygen ceases.

This means that surgeons may operate on a virtually bloodless brain to correct conditions such as faulty brain arteries—now considered inoperable.

Another goal of the Duke research is a new type of chemical treatment for brain tumors. This process would involve cooling the brain, withdrawing its blood supply, and pumping in a chemical solution to stop or slow the growth of tumor cells. After a period of several hours, the blood supply would be restored and the brain temperature brought back to normal.

Members of the Duke research team in addition to Dr. Woodhall are Dr. David H. Reynolds, Dr. Annabelle Craddock, Dr. Yao Chang Chien, Miss Barbara Matthews, and Stephen Mahaley. Dr. Woodhall recently reported on the project at the First International Congress of Neurological Surgery held in Brussels, Belgium.

The hypothermia experiments are being conducted under provisions of a \$30,388 research grant from the National Institute of Neurological Diseases and Blindness, U. S. Public Health Service.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

Physicians from the two Carolinas and Virginia have been invited to a symposium to be held at North Carolina Memorial Hospital on November 21 and 22.

Registration will begin at 8:30 a.m. in the lobby of the hospital. At 9:30 a workshop in cardiology begins with small group discussions of individual cases. Participants are invited to bring their own stethoscopes. Synopses of the cases to be discussed will be sent to advance registrants. Thursday afternoon's program will offer a panel discussion of selected cardiac cases by members of the School of Medicine faculty and Dr. Truman G. Schnabel, associate professor of medicine, University of Pennsylvania School of Medicine.

The program for Friday will begin at 9:15 a.m. with a discussion of Urological Problems in the Female by Dr. Houston S. Everett, associate professor of gynecology at the Johns Hopkins School of Medicine. Also on Friday members of the School of Medicine faculty will discuss Heart Disease in Pregnancy, Problems of Perinatal Mortality, Diagnostic Evaluation in Viral Diseases, Radiation Health, Epiphyseal Fractures, and Neck Injuries.

Physicians attending the program are invited to bring their wives. A coffee hour will be held for the wives on Friday morning at the School of Medicine. On Thursday evening a social hour and dinner will be given for attending physicians and their wives.

The North Carolina State Board of Health is giving financial assistance to the workshop in Cardiology on November 21.

The symposium has been approved for 12 hours credit by the American Academy of General Practice.

* * *

Dr. Robert A. Ross, professor and head of the Department of Obstetrics and Gynecology, has been appointed representative of the commandant of the Sixth Naval District.

The announcement of the appointment was made by Capt. S. E. Hughes, Jr., Naval Medical Corps, of the Sixth Naval District Headquarters in Charleston, S. C. The Sixth Naval District is composed of North and South Carolina, Georgia, Florida, Alabama, Mississippi, and Tennessee.

Dr. Ross will aid and advise in the processing of medical students and physicians interested in the Naval Reserve Corps program. He is a captain in the U. S. Naval Reserve and is a veteran of both World War I and World War II. During World War II he saw action in the Philippine, Iwo Jima, and Okinawa campaigns and took part in the occupation of Japan. He was awarded the Purple Heart Medal.

Dr. Ross was active in the organization of the Naval and Marine Corps Training Center in Durham.

* * *

The Department of Bacteriology recently acquired a new professor of biophysics and one of the most powerful electron microscopes in the world. David Gordon Sharp, Ph.D., the new faculty member, is one of the pioneers in the field of electron microscopy, itself a relatively new science. He graduated from Rutgers University in 1932 in physics. In 1936 he went to Duke University as a consultant engineer and to do graduate work. He became Duke's first graduate student in biophysics, and his Ph.D. in physics was granted in 1939. Until he joined the faculty at U.N.C. he worked at Duke, where his major interest was the application of physical methods to the study of virus particles. Dr. Sharp is now also building an ultracentrifuge which will be capable of 50,000 revolutions per minute.

The electron microscope, one of 56 in existence, cost approximately \$30,000.

* * *

Dr. Lucie Jessner and Dr. D. Wilfred Abse, both of the Department of Psychiatry, have recently returned from a series of psychiatry meetings in Europe.

They first attended the International Psychoanalytic Conference in Paris. From there they went to the Travistock Clinic in London, and then to meetings at the University of Bern in Switzerland.

While in Switzerland Dr. Jessner presented a paper on "Psychosomatic Aspects of Asthma in Children."

The two professors also attended the International Psychiatric Conference in Zurich, Switzerland, where Dr. Abse presented a paper on "Special Problems in Psychotherapy with Schizophrenia." Co-author of this paper was Dr. J. A. Ewing, also of the Department of Psychiatry.

* * *

Plans have been completed for two postgraduate medical programs to be held in Raleigh and the First District in January and February. The First District program will alternate between Ahoskie, Edenton and Elizabeth City, and is co-sponsored by the First District Medical Society. Dr. Archie Y. Eagles of Ahoskie is chairman of the First District Postgraduate Committee. The Raleigh program is co-sponsored by the Wake County Medical Society. Dr. William Senter is chairman of the Wake County Postgraduate Committee.

The First District program will be held for six weeks on Wednesday afternoons and evenings, beginning on January 15. The Raleigh program will meet on Thursday afternoons and evenings for six weeks, beginning on January 16. No meetings will be held on February 12 and 13 because of the Watts Symposium.

A complete program for the courses will be released at a later date. This is the forty-first year since the School of Medicine began sponsoring postgraduate programs for practicing physicians.

* * *

Dr. Robert R. Cadmus, director of N. C. Memorial Hospital of the University of North Carolina, and George M. Norwood, Jr., of the business office of the U.N.C. Division of Health Affairs, were guest speakers at a Columbia, South Carolina, meeting recently.

The two-day institute, which was sponsored by the South Carolina Hospital Association, dealt with financial management and cost findings. Dr. Cadmus spoke on "Administrator's Responsibilities." Norwood spoke on "Accountant's Responsibilities."

* * *

Two faculty members of the University of North Carolina School of Medicine spoke before the meeting of the North Carolina Academy of General Practice held in Asheville on October 14-16.

Also held on October 16 was the Ninth Symposium of the Tenth District Medical Society.

Dr. David A. Davis, professor of surgery in charge of anesthesiology, delivered a paper entitled, "The Effects of Anesthetic Agents on Circulation."

Dr. James Newsome of the Department of Surgery gave a talk entitled "Chemotherapy of Malignancy."

* * *

A \$15,000 grant from the U. S. Public Health Service has been made to Dr. Abraham Widra of the University of North Carolina School of Medicine for a three-year research project. The study will deal with the cell structure and genetics of certain pathogenic yeasts. The effects of various drugs on these microorganisms will also be studied.

Dr. Widra was appointed a faculty member in the Department of Bacteriology and Immunology of the U.N.C. School of Medicine in 1955.

* * *

A man and wife team of physicians has joined the faculty of the University of North Carolina school of Medicine. They are Dr. John H. Arnold and Dr. Mary B. Arnold. Both have been appointed instructors in the Department of Pediatrics of the School of Medicine.

Dr. John Arnold is a native of Port Arthur, Texas, and received his undergraduate and medical education at Tulane University. Prior to joining the U.N.C. faculty, he was an instructor at the Tulane Medical School and for the past two years has been a research fellow in pediatrics at the Children's Medical Center, Boston.

Dr. Mary Arnold is a native of Fitchburg, Massachusetts. She did her undergraduate work at Vassar College and received her M.D. from the University of Vermont. Prior to accepting her present position, she was a research fellow in pediatrics at the Massachusetts General Hospital, Boston.

Both physicians are diplomates of the American Board of Pediatrics.

* * *

The University of North Carolina School of Medicine and North Carolina Memorial Hospital

staged a scientific and educational exhibit at the State Fair held in Raleigh October 15-19. Featured in the exhibit was an artificial heart machine.

The purpose of the exhibit was to show what has been done by the Medical School and Hospital in connection with the Good Health Program of North Carolina.

One interesting point in the exhibit was the fact that last year the U.N.C. School of Medicine provided instructions to more than five times the number of students enrolled in the Medical School.

This situation is explained by the fact that the School of Medicine gives instructions to students in the U.N.C. Schools of Dentistry, Pharmacy and Nursing, and to students who are seeking degrees in scientific fields outside of the field of medicine.

* * *

Dr. K. M. Brinkhous, professor and head of the Department of Pathology, has returned from Europe, where he attended the International Congress on Clinical Chemistry in Stockholm, Sweden.

While in Sweden he also attended the meeting of the International Committee on Coagulation Nomenclature. He was plenary session speaker at the biennial Congress of the European Hematologic Society in Copenhagen while visiting in Denmark.

NEWS NOTES FROM THE

BOWMAN GRAY SCHOOL OF MEDICINE

On November 11, Dr. Paul R. Hawley, retired major general, delivered the third annual Herbert M. Vann Memorial Lecture. Dr. Hawley, the director of the American College of Surgeons, spoke on the subject "Philosophical Aspects of Medicine." Dr. Herbert M. Vann, in whose memory the lectureship was established by the Chi Theta Chapter of the Phi Rho Sigma medical fraternity, was professor of anatomy in the Bowman Gray School of Medicine until his death in 1951.

* * *

The December schedule of programs sponsored by the Bowman Gray Medical Society has been announced:

December 2—Dr. George J. Thomas, chairman, section of anesthesiology, University of Pittsburgh, School of Medicine. Demonstration of anesthetic explosions.

December 16—Dr. E. Cuyler Hammond, professor of biometry, Yale University. "Smoking and death rates—A riddle in cause and effect."

The latter will be sponsored in cooperation with the Sigma Xi Club. Both will be held in the clinical amphitheater at 7:30 p.m.

* * *

At the annual meeting of the North Carolina Orthopedic Association in Raleigh, Dr. H. F. Forsyth, associate professor of orthopedics, was elected chairman of the newly formed Orthopedic and Traumatic Surgery Committee of the State Medical Society.

* * *

Dr. Courtland H. Davis, assistant professor of neurosurgery, has been elected to the Board of Directors of the National Association for Retarded Children.

* * *

Dr. Camillo Artom, professor of biochemistry, recently presented a paper, "Role of Choline in the Hepatic Oxidation of Fat" before the symposium on "The Mode of Action of Lipotropic Factors in Nutrition" held at the Graduate School of Public Health at the University of Pittsburgh.

* * *

Dr. Warren Andrew, professor and director of the Department of Anatomy, and Dr. Norman M. Sulkin, professor of anatomy, recently presented papers before the tenth annual meeting of the Gerontology Society in Cleveland. Dr. Andrew's paper was entitled "The Reality of Age Changes in the Nervous System," and Dr. Sulkin's was "The Duration of Pigmentation in the Nerve Cell Following Prolonged Administration of Acetanilid."

* * *

Dr. Harold D. Green, professor and director of the Department of Physiology and Pharmacology, recently presented a paper before the New Jersey Diabetes Association. His title was "Medical Management of Occlusive Arterial Diseases in the Diabetic."

* * *

Dr. I. Meschan, professor and director of the Department of Radiology, presented a paper, "Cobalt 60 in the Treatment of Cancer" before the North Carolina Nurses Association, which met in Asheville. He also spoke before the Buncombe County Medical Society on "Roentgen Pathology of the Lung Parenchyma."

NORTH CAROLINA STATE BOARD OF MEDICAL EXAMINERS

The Board of Medical Examiners of the State of North Carolina will meet at the Mid Pines Hotel, Southern Pines, North Carolina, Saturday, January 11, 1958, at which time applications for license by endorsement will be interviewed.

NORTH CAROLINA SOCIETY FOR CRIPPLED CHILDREN AND ADULTS, INC.

Felix S. Barker, Director of the Division of Special Education, State Department of Public Instruction, was elected president of the North Carolina Society for Crippled Children and Adults at the 1957 annual convention held in Durham October 25-26. Mr. Barker succeeds Dr. Leslie B. Hohman of the Duke University School of Medicine.

Dr. Edgar T. Thompson of Durham and J. Preston Wrenn of Charlotte were named vice presidents; Mrs. R. L. Sanborn of Bessemer City, secretary; and W. E. Thompson of Chapel Hill, treasurer. Twelve new directors were also named.

The annual sessions included a number of dis-

tinguished speakers. Dr. William deGravelles, director of rehabilitation services at the Duke Medical Center, moderated the opening panel on the rehabilitation of hemiplegics. A panel on the home physical therapy service programs supported by the North Carolina Society for Crippled Children was moderated by Mrs. Eleanor Malone.

Other panels included a discussion on the care of the handicapped aged, moderated by Dr. William P. Richardson of the North Carolina Memorial Hospital, and a discussion of service program for crippled children with Dr. John W. Baluss as moderator.

At the closing banquet Dr. Warner L. Wells spoke on "The Effects of Atomic Fall-out on a Civilian Population."

NORTH CAROLINA HEART ASSOCIATION

If man had never gotten up off all fours and learned to walk on his hind legs, he might not now suffer from varicose veins, according to Dr. John B. Hickam of Duke, president of the North Carolina Heart Association. Dr. Hickam made the statement in announcing the publication of a new booklet by the American Heart Association entitled "Varicose Veins."

The booklet emphasizes that doctors can help patients ward off serious damage if the condition is caught in time. Many measures are now available to minimize the bulging of the leg veins into unsightly swellings and such complications as swelling around the ankles, irritation of the skin, leg ulcers or sores can almost always be prevented by proper care and treatment.

The booklet is designed primarily for patients with varicose veins and their families, and for physicians to give such patients under their care. Single copies are available free on request to local Heart Associations, or by writing to the North Carolina Heart Association, Miller Hall, Chapel Hill, North Carolina.

EDGECOMBE-NASH MEDICAL SOCIETY

The monthly meeting of the Nash-Edgecombe Medical Society was held on October 9 in Rocky Mount.

This meeting brought together the Nash-Edgecombe Bar Association and the medical society in a joint meeting. The yearly meeting with the legal association serves to foster relations between the two groups and an understanding of medico-legal affairs.

ROBESON COUNTY MEDICAL SOCIETY

The Robeson County Medical Society met in Lumberton, North Carolina, on October 7, at the Lorraine Hotel. Dr. Robert Dobson, Instructor in Medicine, U.N.C., spoke on "Dermatologic Problems in General Practice." Dr. Bob Andrews, pathologist at the Robeson County Memorial Hospital, Lumberton, was introduced as a new member.

NEWS NOTES

Dr. Andrew D. Taylor of Charlotte has announced the association of Dr. William P. Coleman in the practice of allergy.

SOUTHERN REGIONAL EDUCATION BOARD

Governor Luther H. Hodges of North Carolina was elected Chairman of the Southern Regional Education Board at its annual meeting in Atlanta on September 21.

Also elected at the meeting were Dr. Philip G. Davidson, president of the University of Louisville, vice chairman, and State Rep. Chappelle Matthews of Georgia, secretary-treasurer.

SREB is an agency of the Southern states whose purpose is to help states in sharing their resources for higher education with each other. SREB is supported through legislative funds appropriated by the states.

NEWS NOTES FROM THE AMERICAN MEDICAL ASSOCIATION

A.M.A. Clinical Meeting Planned

Approximately 4,000 American doctors are expected to attend the American Medical Association's eleventh clinical meeting December 3-6 in Philadelphia.

The postgraduate education meeting is aimed at helping to solve the daily practice problems of the family physician, according to Dr. Thomas G. Hull, secretary of the A.M.A.'s Council on Scientific Assembly.

Meetings will be held in Convention Hall and at the Bellevue-Stratford Hotel, where the House of Delegates, the A.M.A.'s policy-making body, will hold sessions.

A.M.A. Plans Industrial Health Congress

Maintaining high standards of health in industry will be a principal topic of consideration at the eighteenth annual Congress on Industrial Health to be held January 27-29 at the Schroeder Hotel in Milwaukee. Physicians, nurses, industrial hygienists, engineers, and others interested in the field will attend the meeting sponsored by the A.M.A.'s Council on Industrial Health.

Recent developments in industrial health programs and various aspects of immunization programs in industry will be among the subjects covered by panelists at a special session co-sponsored by chairmen of state medical society committees on industrial health. Other features include three technical sessions on—(1) general aspects of disability evaluation; (2) industrial dermatitis, causes and evaluation of disability; (3) low back pain, cause, treatment, evaluation of disability, rehabilitation.

A.M.A. Plans New Exhibits in 1958

To reach more and more Americans with authentic up-to-date health information, the A.M.A.'s

Bureau of Exhibits announces a number of major plans for 1958. First, a new exhibit titled "How We Breathe" will be ready for bookings after January 1, 1958. This exhibit will present a three dimensional model for the organs involved in breathing—the nose, pharynx, larynx, bronchial tubes, and lungs. Other features include actual preserved human lungs; a unit to demonstrate the mechanism of breathing and the part played by the diaphragm and rib cage, and a section showing the exchange of oxygen from the lungs to the blood and carbon dioxide from the blood to the lungs.

Two other exhibits also are well along in the planning stages for next year: (1) the brain and nervous system, featuring a human brain embedded in plastic, and (2) the endocrine system. Further details will be announced later.

Finally, small editions of the popular "Life Begins" exhibit are being built, incorporating most of the information in the large exhibit but displaying only one fetus embedded in plastic. Other fetuses in varying stages of development will be shown pictorially. This type of exhibit is extremely lightweight and should prove most attractive to those medical societies far away from Chicago.

A.M.A. Plans Two "Nomenclature" Institutes in '58

So popular have the Nomenclature Institutes been that the American Medical Association again plans to sponsor two more of these short courses during 1958. The first will be conducted March 31 to April 2 at Tulsa, Oklahoma. The second will be held in July in Boston. These three-day meetings are planned by the A.M.A. as a special service to medical record librarians and others working with the **Standard Nomenclature of Diseases and Operations** in the hospital, clinic or doctor's office. Queries should be sent to the A.M.A.

First Come, First Served

It's time for medical societies to begin planning for 1958 county and state fairs. The A.M.A. Bureau of Exhibits urges all medical societies to arrange for bookings of specific health exhibits as soon as possible. A number of commitments for some of the more popular exhibits have already been made.

Wintertime Fun

How to live sensibly and still have a good time in cold weather is the way of life outlined in a new series of radio transcriptions the A.M.A.'s Bureau of Health Education will have available for use by medical societies early in December. In the 13-program series "The Picture of Health," brief dramatizations of typical family life are presented. Subjects covered include: general winter exposures; snow and ice hazards for pedestrians; frostbite and chilblains; skiing hazards; diet; driving; household procedures (such as temperature and moisture in the room). Dr. W. W. Bolton, Bureau associate director, serves as medical consultant.

1957 Survey of County Medical Societies

Replies to the questionnaires sent to county medical societies concerning their activities and programs have been tabulated and published in booklet form by the A.M.A.'s Council on Medical Service. The booklet—"1957 Nationwide Survey on County Medical Society Activities"—contains information on types of county medical society programs (such as emergency call systems or grievance committees), fee schedules, life insurance, attendance at meetings and dues. Copies will be sent to all county and state medical societies. Additional copies may be secured from the Council.

Trans-Atlantic Conference on Cancer Chemotherapy

Scientists in the United States and Great Britain will be joined by the new underseas cable on Wednesday, December 4, to exchange information on a vital frontier in research, cancer chemotherapy. It will be the second trans-Atlantic medical conference in history.

Three world medical centers will be linked—Philadelphia, where the American Medical Association will be convened in its eleventh annual Clinical Meeting; London, where a special panel will meet in Barnes Hall of the Royal Society of Medicine, and Bethesda, Maryland, where the program will be heard by scientists at the National Institutes of Health.

The hour-and-a-quarter conference on "Advances in the Chemotherapy of Cancer" will be sponsored by the A.M.A. and the Royal Society of Medicine in cooperation with Smith, Kline & French Laboratories.

In Philadelphia, arrangements have been made so that physicians attending the Clinical Meeting can hear the discussions starting at 3 p.m. EST over a special high-fidelity system in the Grand Ballroom of Convention Hall, scene of the winter meeting's scientific programs. Similar plans are being made in London and Bethesda.

Smith, Kline & French said these trans-Atlantic conferences are part of its program to foster international relations in the medical profession. Such activities in all professions and walks of life were urged by President Eisenhower last year in his "people-to-people" address.

THE ACADEMY OF PSYCHOSOMATIC MEDICINE

The following officers were elected at the fourth annual meeting of The Academy of Psychosomatic Medicine held October 17-19, 1957 at the Morrison Hotel in Chicago:

President—Dr. Bernard B. Raginsky, Montreal, Quebec, Canada.

Vice President—Dr. Lester L. Coleman, New York City.

Secretary—Dr. Wilfred Dorfman, Brooklyn, New York.

Treasurer—Dr. George F. Sutherland, Baltimore, Maryland.

Historian—Dr. Maury Sanger, Brooklyn, New York.

President-Elect—Dr. William S. Kroger, Chicago, Illinois.

AMERICAN ROENTGEN RAY SOCIETY

At the fifty-eighth annual meeting of the American Roentgen Ray Society, held in Washington, D. C., October 1-4, the following chief officers were elected to serve through 1957-1958:

President-Elect—Barton R. Young, M.D., Germantown, Pennsylvania.

Secretary—C. Allen Good, M.D., Rochester, Minnesota.

Treasurer—Robert K. Arbuckle, M.D., Oakland, California. re-elected.

Chairman, Executive Council — Wilbur Bailey, M.D., Los Angeles, California.

Wendell G. Scott, M.D., St. Louis, Missouri, assumed the office of the presidency upon the first session of the Society's meeting, October 1.

The 1958 meeting will be held in Washington, D. C., September 27—October 3, in the Shoreham Hotel.

PAN AMERICAN SANITARY BUREAU

Nuclear radiation in all its forms is generally harmful to living organisms, and the radioactive contamination of any inhabited area presents a major public health problem which must be solved, if nuclear energy is to be fully utilized. All medical and public health workers must, therefore, be trained to meet the new demands made on them, according to the World Health Organization's Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel.

During its fourth session just held in Geneva under the chairmanship of Sir Ernest Rock of Carlisle, London, the Committee drew up a training schedule for all categories of public health personnel. This will bring hospital administrators, industrial hygiene workers, sanitary and hydraulic engineers, veterinary health officers, mental health specialists, and public health nurses back to school for periods ranging from one day to several weeks to learn how to protect the public against radiation. The same type of training is envisaged for public health workers now undergoing their basic studies.

Fundamentally, the Committee stated, the approach must be one of prevention through the limitation or elimination of exposure, since, at the present time, there is no entirely satisfactory method for alleviating the effects of radiation injury once it has been sustained, except in certain late cases through plastic surgery.

AMERICAN FOUNDATION FOR ALLERGIC DISEASES

Announcement of post-doctoral fellowships in research and clinical allergy for two years each has been made by the American Foundation for Allergic Diseases.

Stipend: first year, \$4,500; second year, \$4,750; laboratory expenses for the two-year period, \$750.

Candidates must be graduates of approved medical schools and must have completed one or two years of graduate training requiring as a preliminary to certification by the Board of Internal Medicine or Pediatrics; they are to divide their time between research and clinical training and, in the second year, teaching. This training will be credited toward the Sub-specialty in Allergy by the Board of Internal Medicine and the Board of Pediatrics.

Requests for applications should be sent directly to one of the following in whose field the candidate would like to work: Dr. Colin M. MacLeod, Professor of Research Medicine, University of Pennsylvania, 820 Maloney Clinic, 36th and Spruce Streets, Philadelphia 4, Pennsylvania; Dr. Herman N. Eisen, Professor of Medicine (Dermatology), Washington University School of Medicine, 600 South Kingshighway, Saint Louis 10, Missouri.

AMERICAN COLLEGE OF CHEST PHYSICIANS

The Fifth International Congress on Diseases of the Chest, sponsored by the American College of Chest Physicians, will be held in Tokyo, Japan, September 7-11, 1958. The Congress will be presented under the patronage of the Government of Japan and the Japan Science Council. The Congress has been endorsed by the Japan Medical Association.

Eminent scientists from countries throughout the world will participate in discussions on a variety of subjects. The proceedings will be simultaneously

interpreted into the three official languages for the Congress—Japanese, French, and English.

The registration fee for each physician attending the Congress is \$25.00 (U. S. currency) and \$10.00 for each family member accompanying the physician.

For additional information write: Mr. Murray Kornfeld, Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

U. S. ATOMIC ENERGY COMMISSION

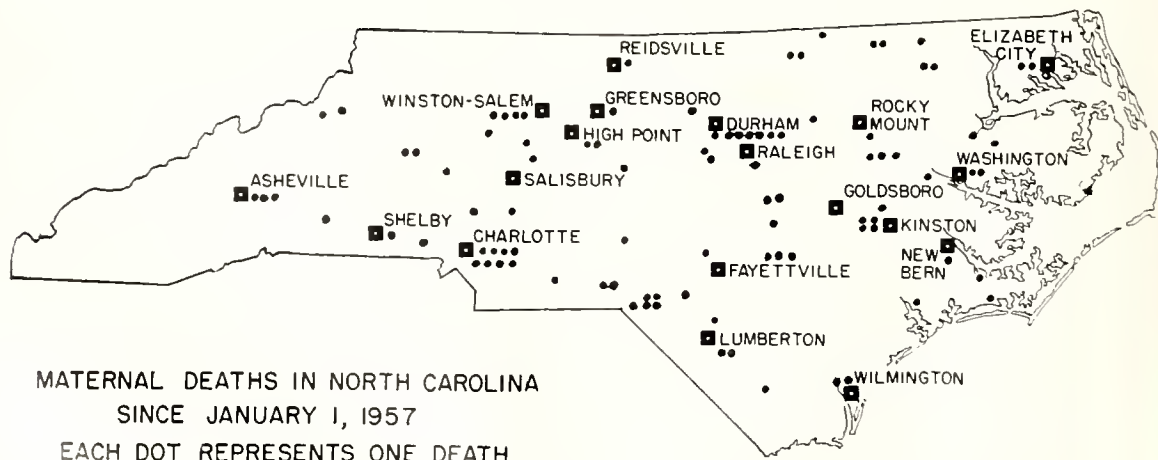
In order to help speed up the peaceful uses of nuclear energy throughout the world, the Atomic Energy Commission is participating in and supporting conferences which bring together in the United States groups of leading scientists from friendly nations for topical discussions on specialized atomic energy subjects.

This is the Atomic Energy Commission's response to a need, expressed by many scientists, for an opportunity to discuss the many unclassified problems and developments in atomic energy which cannot be taken up in the broad Geneva-type conference.

Not only will American scientists benefit from the exchange of ideas on scientific advances, but it is hoped that these discussions will do much to lower the barriers which impede the interchange of information among friendly powers.

These conferences generally will be sponsored by private institutions in this country. They will cover various aspects of physics, chemistry, biology, medicine, and other sciences relating to nuclear energy.

The Fifth International Conference on Low Temperature Physics and Chemistry, held at the University of Wisconsin in August, and the International Conference on Neutron Physics and Chemistry, held at Columbia University in September, were among the first meetings in which the AEC took part and supported.



MATERNAL DEATHS IN NORTH CAROLINA
SINCE JANUARY 1, 1957
EACH DOT REPRESENTS ONE DEATH

The Month in Washington

Several months in advance of the return of the Eighty-fifth Congress for its election-year second session, influential figures in the field of health in both the executive branch of the government and in Congress were being heard with regard to what 1958 has in store for the medical profession.

Because of the roles they play in the Capital, their views are worth more than passing notice. One is the chairman of the important health appropriations subcommittee of the House, Rep. John Fogarty (D.R.I.). He used as a forum for his prophecies the annual convention of the American Hospital Association.

Other prognostications came from Dr. Aims C. McGuinness, special assistant for health and medical affairs to Secretary Folsom of the Department of Health, Education, and Welfare. Dr. McGuinness spoke out at a dedication ceremony of a new chronic disease and rehabilitation facility in Maine.

Mr. Fogarty places at the top of his predictions some action on federal construction aid to medical schools. The Rhode Island Democrat has his own bill on the subject, although there are others pending. Comments Mr. Fogarty: "... the shortage of health education facilities today is probably the most serious bottleneck in our whole medical system . . . These schools . . . fall far short of accomodating the fully qualified and competent young men and women in America who are anxious to train and qualify in medical, dental, and public health fields."

The record of the past several years has shown that no member of the House is listened to more carefully when it comes to health than Mr. Fogarty. His philosophy in the health field is worth noting: "It is now generally accepted that the health of our people is a major national resource and that the government, therefore, has a direct responsibility for the health of everyone."

Dr. McGuinness also spoke out strongly for federal aid to medical schools. Failure to meet the needs of the schools, he told his

audience, would be "the worst kind of economy." He feels that the administration proposal for \$225 million in construction grants would bring classrooms and research laboratories "much closer to current and projected needs."

While neither man had any specific legislative proposals to make in the field, both foresee a growing role for hospitals in the practice of medicine. Dr. McGuinness put it this way: "General hospitals must broaden their services and achieve greater coordination. The term 'hospital care' should include not only bed care but diagnostic service as well as service to ambulatory patients."

Mr. Fogarty, looking ahead 25 years, said it was safe to predict that virtually every general hospital in the nation will be providing at least as much preventive service as curative service. "You are, in fact, moving closer each moment to the day when hospitals will be the focal point of health services for all of us, throughout our entire lives."

The same day that Mr. Fogarty was urging the hospitals to use the basic Hill-Burton hospital construction program to meet future health needs, the AHA House of Delegates approved a set of legislative proposals to present to the next session.

They would accomplish the following: (1) extend the act for five years beyond June, 1959, (2) authorize matching Hill-Burton funds for renovation and repairs of hospital plants, (3) set up loan authority so that hospitals not desiring grant money could borrow construction and renovation funds at very low interest rates (from 1½ to 2 per cent). The House also urged a grants program to hospitals with nursing schools and to other nurse institutions for professional education, exclusive of construction grants.

* * *

Notes

One committee of Congress knows months in advance just exactly what it plans to do the day Congress reconvenes. The tax-writing House Ways and Means Committee has set hearings starting January 7 on possible tax reductions next year.

Included on the agenda will be testimony from various organizations on the Jenkins-

Keogh bills for allowing tax deferments for money paid into retirement plans. The American Thrift Assembly, which is backed by the American Medical Association and other professional and business groups, plans to be heard at some time during the 30 days of hearings.

* * *

Veterans Administrator Harvey Higley believes that the public is losing interest in the veteran and his problems, and that some doctors no longer hesitate to attack medical care for veterans, particularly those with non-service-connected disabilities. Mr. Higley spoke at the annual American Legion convention.

* * *

Health directors of 21 American republics, holding their annual Pan American Sanitary Organization meetings here this fall, voted a \$3 million budget for the Pan American Sanitary Bureau's 160-odd health projects for next year.

Healing of Donor Sites Speeded With Furacin

Donor sites from which skin grafts are removed with a dermatome offer excellent opportunities for the study of wound healing. Such a study has recently been reported by J. V. Jeffords, M.D., and Robert F. Hagerty, M.D., from the Department of Surgery of the Medical College of South Carolina, Charleston. Color photograph records of the healing process add to the value of their data.

The surgeons were interested in making a quantitative and qualitative comparison of the effects of Furacin Soluble Dressing and an aseptic technique, using petrolatum-impregnated fine mesh gauze on the healing of the donor sites. They found much better results with Furacin, the percentage of epithelization being higher in the Furacin-treated sites. This was probably due in part to suppression of secondary bacterial infection.

In 38 patients, 50 donor sites each were dressed half with gauze (unbleached muslin) impregnated with Furacin Soluble Dressing (Eaton) and half with petrolatum gauze. The average percentage of epithelization of sites dressed with Furacin gauze was 90.2 per cent as compared with 80.3 per cent with the control gauze. The frequency of adherence of the epithelizing surface of the wound to the fine mesh gauze impregnated with Furacin Soluble Dressing was less than with petrolatum. No evidence of sensitization to Furacin was noted in this study.

(Jeffords, J. V., and Hagerty, R. F.: The healing of donor sites. *Ann. Surg.* 145:169 (Feb.) 1957.)

BOOK REVIEWS

New Research Techniques of Neuroanatomy: A Symposium Sponsored by the National Multiple Sclerosis Society. Edited by William F. Windle. 108 pages, with 25 illustrations. Price, \$4.75. Springfield, Illinois: Charles C Thomas, Publisher, 1957.

This book records the talks given at a symposium sponsored by the National Multiple Sclerosis Society. There are nine contributors. The methods discussed include electron microscopy, two modifications of older silver impregnation methods, tissue culture (hardly a new technique), blood flow studied by radio-autography, and some histo-chemical methods. For the most part, the details of the methods are discussed more extensively than the results. The latter are available elsewhere in better form and greater clarity. These methods appear to hold promise for the future, but the meaning of much of the material is not revealed in this presentation. The use of words such as "adielectronic," "maientic," and "post-osmicated" does not help the reader.

Methods in Surgical Pathology. By Henry A. Teloh, M.D. 127 pages. Price, \$4.75. Springfield, Illinois: Charles C Thomas, Publisher, 1957.

This handbook contains chapters devoted to operating room procedures, gross examination, frozen section, records, culture methods, prognosis, and a procedure for various organs that are presented to the laboratory for analysis. The appendix includes protocols of gross and microscopic examination followed by diagnosis.

The large print and directive style should make the book a convenient and valuable guide, especially for residents. Although the presentation by necessity is detailed, the lengthy discussion and repetitious form make for tedious reading. Emphasis is properly placed on prognosis and the need to quantitate pathologic change.

Anesthesiology and Related Problems.

Edited by Otto V. St. Whitelock. 181 pages. Price, \$4.00. *Annals of the New York Academy of Sciences*, Vol. 66, Art. 4, pages 841-1022, 1957.

Of interest primarily to the surgeon and to the anesthesiologist, this symposium is given by 26 authorities. The 16 articles fall into four parts: geriatric anesthesia, controlled respiration, fluid and electrolyte balance, and hypotension.

Intriguing subjects, such as mechanical respirators and the effects of pressure breathing on the pulmonary circulation, are discussed. The question of possible harmful effects of respiratory alkalosis due to manual hyperventilation is dealt with in some detail. Dr. Harris' clear discussion of problems in fluid and electrolyte therapy in pediatric

surgery is of interest to anyone who treats hospitalized children. The article by Dr. Burstein on adrenocortical insufficiency presents examples of proper and improper preparation of the steroid-treated patient. Zweifach and Hershey, in their article on protective mechanisms in shock, leave the reader hanging in mid air, as no special conclusions are drawn. And who can rightly draw many definite conclusions on this subject, except that there is a need for further study? Dr. Barber presents a practical review of nutritional and hematologic problems in the geriatric patient.

Nearly every physician would find this symposium worth-while reading. Many anesthesiologists would want to add it to their bookshelves.

The Bases of Treatment. By Neuton S. Stern, M.D., and Thomas N. Stern. 176 pages. Price, \$4.75. Springfield, Illinois: Charles C Thomas, Publisher, 1957.

This book, as stated in the introduction, is not intended as a materia medica, with specific remedies for various diseases, but is rather a somewhat philosophic discussion of the general principles upon which therapy is based. Part I begins with an excellent chapter on the importance of confidence in the physician, and sound advice on how to win and deserve the confidence of the patient and his family. Other chapters deal with diagnosis as a basis of treatment; disease as a

dynamic process; and disease as a disturbed physiologic process. Part II, Care of the Patient, discusses fluid and electrolyte balance, diet, the comfort of the patient, and philosophic considerations in the use of drugs. Part III, Special Cases in Therapy, takes up prevention of disease, iatrogenic disease, and psychotherapy.

The book should be helpful to students and practitioners as presenting fundamental principles of treatment, which should hold good through the years. It is not intended as a volume on current therapy.

The Medical Interview: A Study of Clinically Significant Interpersonal Relations. By Ainslie Meares, M.B.B.S., B. Agr. Sc., D.P.M. 117 pages. Price, \$3.50. Springfield, Illinois: Charles C Thomas, Publisher, 1957

The author, a practicing psychiatrist, states in the introduction that "The medical interview is distinct from medical history-taking on the one hand, and the psychiatric interview on the other. It refers to the discussion which takes place when it is some problem rather than a symptom which brings the patient to consultation." He then discusses the motives that send patients for advice; the importance of rapport between doctor and patient; ways of encouraging patients to express their fears and conflicts; and the power of suggestion, rightly used.

The aim of the book, as stated on the cover, is commendable: "To help patients by the simple procedure of talking to them." Unfortunately, a formidable language barrier is apt to discourage the reader at the beginning. There is much good advice in the book, but it has to be dug out from a tangled mass of words, too many of them unnecessarily long and technical.

The Care of The Expectant Mother. By Josephine Barnes. 270 pages. Price, \$7.50. New York: The Philosophical Library, 1957.

This monograph consists of three parts: first, a short section on normal anatomy and physiology of pregnancy; second, nine chapters on abnormal gestation; and finally, ten chapters concerned with diseases complicating pregnancy. The latter two sections are a veritable Cook's tour of pregnancy complications, a situation that of necessity limits detailed description of disease entities or management in a volume of this size.

The text is considered inadequate as a synopsis of obstetrics and too limited in its scope to serve as a textbook for medical students. Perhaps the most legitimate application of this volume is in nursing or midwife training, where comprehensive coverage of the various topics discussed is not required. The text is considered clear and accurate and the management of obstetric problems is conservative. Illustrations are adequate and the format attractive.



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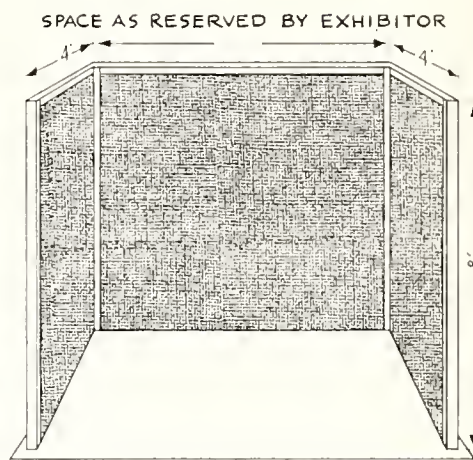
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In Memoriam

CLARENCE N. PEELER, M.D.

WHEREAS, By the death of Doctor C. N. Peeler on August 28, 1957, the Mecklenburg County Medical Society was deprived of one of its oldest members and one of its past presidents; and,

WHEREAS, in his long and distinguished career, he was always a faithful attendant at the meetings of the Society and a frequent contributor to its proceedings; and,

WHEREAS, In his professional and personal life he consistently reflected the finest traditions of medicine; and,

WHEREAS, Not only because of the above attributes but because of his innate thoughtfulness, kindness and tolerance he was one of the most beloved and respected members of this Society;

Be It Therefore Resolved That we extend to the family our profound regret in our mutual loss but at the same time being mindful of a happier side, *viz.*, that this is a better medical society, his community a better community, his Church a better church, his beloved Wake Forest a better college, and his state a better state because of his sojourn here;

And Be It Further Resolved That a copy of these resolutions be incorporated in the permanent files of the Society and a copy be forwarded to his family.

JOHN WATTS FARTHING, M.D., F.A.C.S.

Wilmington and Eastern North Carolina, along with the medical profession, suffered a tragic loss upon the death of Dr. John Watts Farthing, July 27, 1957. Dr. Farthing, only 48 years of age, had been in declining health for several months preceding his unexpected death from cardiorespiratory complications.

Dr. Farthing was born in Pittsboro, North Carolina, March 3, 1909, the son of Dr. and Mrs. L. E. Farthing. He grew up in Wilmington, where his father was a prominent physician for many years. Following graduation from New Hanover High School, he matriculated at the University of North Carolina and, upon graduation in 1929, entered the Medical School of the University of Pennsylvania. An honor student, he graduated in 1933, served as an intern in the Hospital of the University of Pennsylvania from 1933-1935, and then advanced to a fellowship in surgery at the Mayo Clinic. Upon the completion of his surgical training, with an M.S. in Surgery, 1938, he returned to Wilmington and began the practice of general surgery.

A successful surgical practice developed and continuously progressed up to his retirement in January, 1957, because of failing health. He felt that physically he was no longer able to give his patients the untiring and unexcelled care which had characterized his entire surgical career.

Fellowship in the American College of Surgeons

was achieved in 1942; membership in the New Hanover County Medical Society, North Carolina, American Medical Association, the Southeastern Surgical Congress, the North Carolina Surgical Association, and the Society of Railroad Surgeons was bestowed upon him, and valuable, untiring service to them continued through the years. He was an attending surgeon, James Walker Memorial Hospital, former chief of staff, and consulting surgeon, Community Hospital, Wilmington.

Dr. Farthing was a deacon in the First Presbyterian Church of Wilmington, a 32nd Degree Mason, an active member of the Civitan Club, and was active in numerous other civic organizations. His was an active role in the community life of this area.

Now therefore it is moved, seconded, and adopted that this resolution and expression of our bereavement and loss at the passing of our colleague and friend be sent to the family of the late Dr. John Watts Farthing. Furthermore, this resolution shall be entered into the minutes of this Society, with copies to be transmitted to the Medical Society of the State of North Carolina and the American College of Surgeons.

Adopted this 18th day of September, 1957.

S. E. Warshauer, M.D.

E. J. Wells, M.D.

New Hanover County Medical Society

ANNIE THOMPSON SMITH, M.D.

Dr. Annie Thompson Smith was born in Evington, Virginia, on May 14, 1894. Her family moved to Durham about 1901. She attended the Durham City Schools and graduated from the Durham High School in 1912. She graduated from Trinity College, Durham, North Carolina, in the Class of 1917, with a B.A. degree. She received her M.A. degree in 1918. She took her first two years of medicine at the University of North Carolina Medical School and the last two years at the University of Illinois, from which she was graduated in 1923. She spent two years as an intern at St. Francis' Hospital, Evanston, Illinois, and several summers at the University of Michigan, Ann Arbor, and at Washington University, St. Louis, doing postgraduate work. She was a resident at the West Philadelphia Woman's Hospital in Philadelphia for six months before coming to Durham to practice medicine in April, 1926. For several summers after coming to Durham, she attended Post-Graduate Hospital in New York. After beginning her practice in Durham in April, 1926, she carried on an active general practice until a few months prior to her death.

She was interested in all sorts of civic activities. She was a charter member of the Business and Professional Women's Club. She was a charter member of the Altrusa Club and helped organize it. She was active in the American Association of University Women. She was a member of the Durham-

Orange County Medical Society and of the Academy of General Practice. At one time she was very active in Girl Scouting. She was an active member of the Presbyterian Church. She was active in the charity service at Lincoln and at Watts Hospitals. She did outstanding service in the well-baby clinic at Lincoln Hospital and took a sincere interest in the parents at the clinic. As the first woman to practice medicine in Durham, she was active in her chosen profession and carried on a large private practice.

To say that Annie Thompson Smith was a good doctor does not begin to express what one would like to say about her. She was well informed. She gave her patients her best, and she never hesitated to call for consultation when she felt that she needed it. She gave freely of her time and service and spent hours in free clinics without thought of recompense. Her patients loved her. She read, she loved music, and she was tremendously interested in the humanities. She believed that woman should hold a dignified place in her profession. It is doubtful if anyone ever heard her say an unkind word about any person. She was as free from prejudice and bias as any person could be. She believed in the Hippocratic Oath and followed it closely. Her patients and her friends came first. There was nothing selfish in her makeup. When her friends were right, she praised them; when they were wrong, she told them.

She did not write a biographical sketch of her last illness. There will be no book to celebrate the last battle that she fought, but she faced this battle with a courage that could not have been excelled. The fact that she lived by the Hippocratic Oath is correct, but another man that she followed more closely than she did Hippocrates was a man called Christ. She lived as He would have wanted her to live.

J. Kempton Jones, M.D.
Secretary, Durham-Orange
County Medical Society

WILLIAM T. SHAVER, M.D.

On July 16, 1957, death came to our friend and colleague, Dr. William T. Shaver of Albemarle. The medical profession and his community suffered a severe loss in the death of Dr. Shaver, which occurred as a result of a coronary occlusion at his home.

William Trantham Shaver was born July 30, 1893, in Salisbury, North Carolina, and received his earlier schooling in the Salisbury schools. He attended the University of North Carolina and was graduated

from the University of Maryland School of Medicine in 1919. He completed his surgical residency at Maryland General Hospital in Baltimore. He began his practice of surgery in Badin, North Carolina, in 1920, later moving to Albemarle in 1926, where he established a surgical clinic. For 22 years he served as medical director of the Yadkin Hospital, in addition to carrying on his practice of surgery.

He was married to Miss Ada Worsham, and from this marriage there was one child, a daughter, Mrs. Laura Maie Shaver Pettee, of Wilmington, North Carolina.

Honors and responsibilities rested lightly on the shoulders of this physician, and he carried both with great dignity and with pride. He will long be remembered by many for his work, especially with the youth of this community. His service as county chairman of the Morehead Scholarship Foundation and his interest and participation in the American Legion Junior Baseball program are only two of the facets of youth that shine brighter as a result of his life.

The medical profession was considerably advanced by his wise counsel and guidance. He was a past president of the Stanly County Medical Society, a past president of the Seventh District Medical Society, and was chief of staff of the Stanly County Hospital in 1953. He was firm in his decisions and uncompromising in his duty; but, withal, he had a rare sense of humor which stood him in good stead whenever difficult decisions presented themselves.

In the death of Dr. Shaver, the Stanly County Medical Society, and the community in which he served lost one of the real doctors of the "old school." He was both a scholar and a true gentleman. Of him it might well be said: "His life was gentle, and the elements so mixed in him that Nature might stand up and say to all the world, 'This was a man.'"

In his memory, Be It Resolved that we, as a society, extend our deep and abiding sympathy to his widow, Mrs. Ada Worsham Shaver, and his daughter, Mrs. Laura Maie Shaver Pettee.

BE IT FURTHER RESOLVED, that a copy of this remembrance be given to the members of his immediate family, a copy sent to the NORTH CAROLINA MEDICAL JOURNAL, and a copy incorporated into the proceedings of this Society.

Resolutions Committee
Stanly County Medical Society
H. L. Murray, M. D., Chairman
W. H. Freeman, M.D.
Edward S. Bivens, M.D.

NORTH CAROLINA

Medical Journal



Vol. 18 No. 12
December, 1957

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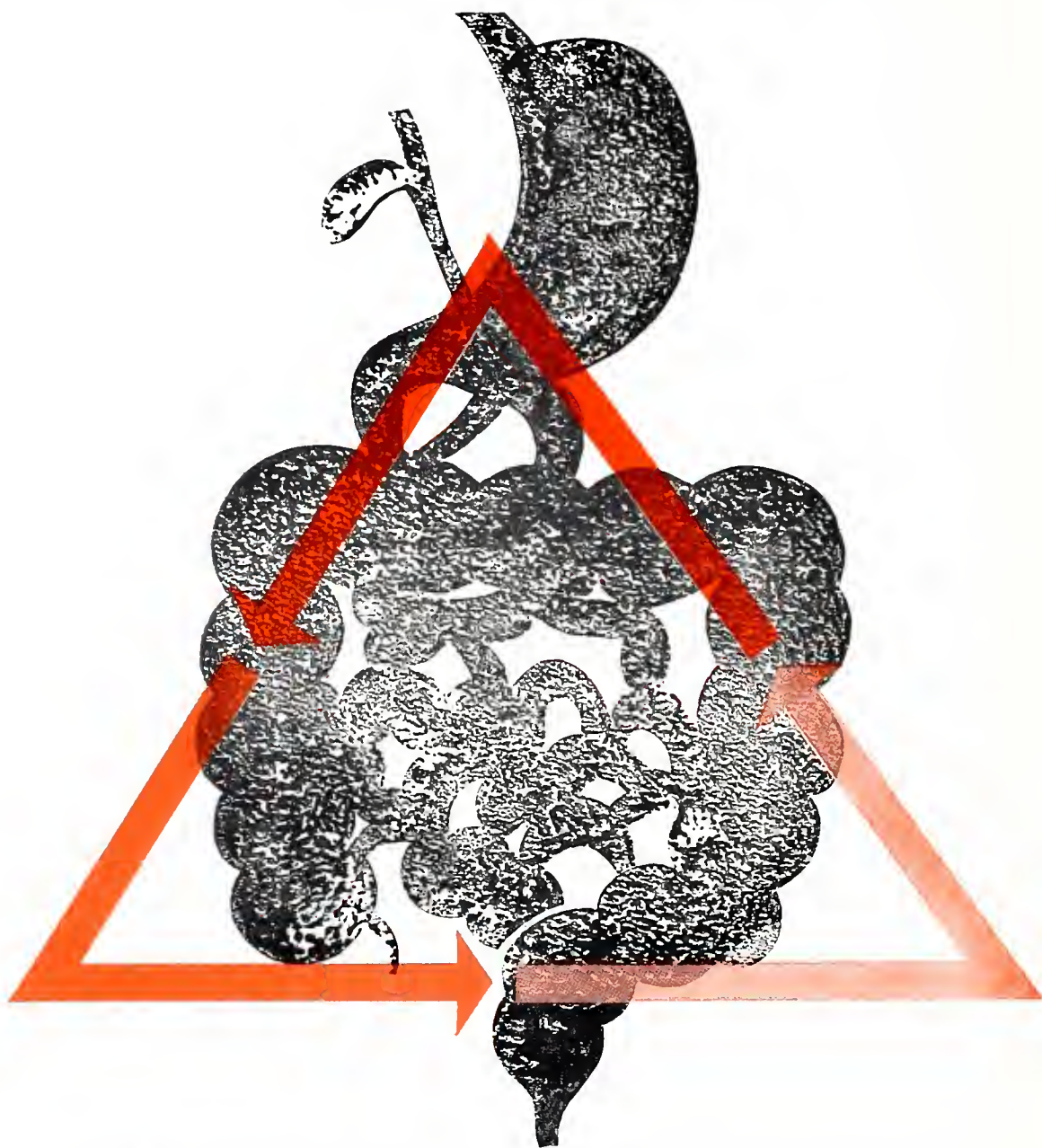
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No. 12

Panel Discussion on the Diagnosis of Diseases Of the Gallbladder and Common Duct

Oral Cholecystography

PHILIP M. JOHNSON, M.D.*

CHAPEL HILL

This presentation is concerned primarily with two points: the status of oral cholecystography today, four years after the advent of intravenous cholangiography; and methods which will permit greater realization of the diagnostic potential of oral cholecystography.

Comparison of Oral and Intravenous Cholecystography

It is well known that the diatrizoate salt Cholografin will opacify a greater percentage of gallbladders than will the oral cholecystographic media. Recent reports in the literature⁽¹⁾ indicate that Telepaque, for example, will opacify only 49 to 62 per cent of gallbladders previously visualized with Cholografin. One source⁽²⁾ has stated that Biligrafin, the European counterpart of Cholografin, "gave the highest percentage of contrasts of the gallbladder . . . and showed the largest number of stones."

This is not all, for the intravenous cholangiogram usually permits adequate study of the biliary duct system and partial evaluation of the renal collecting systems. There are, however, five factors that detract from the apparent superiority of intravenous cholangiography. The first of these is the greater cost. The second is the greater amount of time expended by all persons concerned, not the least of whom is the patient. Third is the potentially greater hazard due to the hypotensive action of

Cholografin and inherent in the intravenous injection of iodides. Fourth, the density of the gallbladder shadow is not only less intense than that cast by Telepaque, but usually is nonhomogenous, due to layering. Fifth, no information concerning function can be adduced. An alternative method of examination, the cholescintogram, is less accurate than oral cholecystography and results in needless irradiation of the patient⁽³⁾. Thus the oral cholecystogram, despite its limitations, remains the basic method of examination of the gallbladder.

The accuracy of well performed oral cholecystography is high. Sossman⁽⁴⁾ has stated that a positive diagnosis of cholelithiasis will be confirmed in nearly 100 per cent of the cases, while nonvisualization of the gallbladder indicates gross disease in 95 per cent. Strong confirmation of these figures has come recently from Wickbom's⁽⁵⁾ analysis of more than 1,300 oral cholecystograms, all followed by surgery. The diagnosis of cholelithiasis was confirmed at operation in 725 of 728 cases, or more than 99 per cent. Furthermore, 92 per cent of the gallbladders that were visualized equivocally, or not at all, contained stones.

The significance of cholelithiasis for the surgeon deserves reemphasis. Various analyses⁽⁶⁾ have shown that when stones are found at cholecystectomy, the postoperative result will be satisfactory in 90 to 95 per cent of the cases. However, this figure drops to 60 per cent or less when no stone is present. The surgeon is therefore grateful

Presented to the Section on Radiology, Medical Society of the State of North Carolina, Asheville, May 8, 1957.

*From the Department of Radiology, University of North Carolina School of Medicine, Chapel Hill.

when we can present him with evidence, direct or indirect, of cholelithiasis.

Means for Utilizing Cholecystography

There are three cholecystographic media in current use: the diiodate Priodax. A new triiodate, Vesipaque, has been described in the Italian literature⁽⁷⁾ and apparently compares favorably with Telepaque; clinical reports of its use have not yet appeared in this country. Monophen, a diiodate introduced in 1944 and comparable to Priodax, never achieved popularity and has been discontinued⁽⁸⁾. Acetylated Telepaque has been found to have a much lower incidence of side effects, but a concomitant marked reduction in density made it unacceptable for clinical use⁽⁹⁾. The sodium salt of Telepaque was recently described as leaving virtually no "colonic trace," without impairment of radiographic density⁽¹⁰⁾.

Of these three media, Telepaque must be considered superior. Nearly without exception, numerous comparative studies have reached this conclusion^(7, 8, 11). With the 3-Gm. dose of Telepaque the gallbladder is well opacified in about 83 per cent of the cases and fails to be opacified in only 10 per cent. The incidence of side effects is about 37 per cent. Teridax produces a shadow intermediate in density between Priodax and Telepaque⁽¹²⁾; in order to obtain a density comparable to that of Telepaque, the dosage of Teridax must be increased, with a concomitant rise in side effects^(11c). Proponents of Teridax describe three advantages: the virtual absence of a "colonic trace"; reduced danger of masking small calculi; and a more accurate reflection of the functional condition of the gallbladder. The "colonic trace," however, is often an advantage in cholecystography; methods exist for overcoming the masking effect of dense opacification; and inferences concerning gallbladder function are of far less importance than the demonstration of calculi.

The 3-Gm. dose of Telepaque is probably too large for all but the most obese patient. A study⁽¹³⁾ employing the 2-Gm. dose has shown that the number of extremely dense, "white" gallbladder shadows is significantly reduced, while the number of "satisfactory" shadows drops only 4 per cent. Failure to opacify with the smaller dose

carries the same significance as with the larger. In a series of 50 patients whose gallbladders were not visualized with 2 Gm. of Telepaque, 49 were proved surgically to have intrinsic cholecystic disease; the fiftieth had an obstructing carcinoma of the pancreas⁽¹⁴⁾. At the North Carolina Memorial Hospital the 3-Gm. dose of Telepaque has been employed for the last four years; at present there is consideration of reducing the dose to 2 Gm.

Method of examination

Regardless of the type of contrast medium employed, it is the actual examination of the patient that often fails to yield the maximum information. Despite general recognition that the prone or prone-oblique film of the right upper quadrant does not by itself constitute a complete examination, too frequently this is the only film made. Kirklin's⁽¹⁵⁾ lateral decubitus film of the right upper quadrant tends to separate the gallbladder from overlying shadows and will demonstrate calculi lying in the most dependent portion. However, the lateral decubitus view lacks two advantages of erect fluoroscopy, and should be used routinely only when it is not possible to employ fluoroscopy with every patient. Erect fluoroscopy has, in recent years, returned to favor. It permits the radiologist, in the great majority of cases, to rotate the gallbladder free of overlying shadows or to displace the latter with the compression cone. In addition, the disadvantage of the overly dense gallbladder is offset by spot films made with graded compression, which allow demonstration of small, lucent stones that otherwise might be obscured by heavily opacified bile. As with the lateral decubitus view, the effect of gravity is utilized to determine the mobility or fixity of any given intraluminal shadow. Only by this means can a polyp or myoma be differentiated preoperatively from a lucent stone. Furthermore, the interesting phenomenon of layering of stones atop bile of greater density can be seen only when gravity is allowed to contribute to the examination.

Feldman⁽¹⁶⁾ has reported that, in his hands, erect fluoroscopy increased diagnostic accuracy by 8 per cent. Hoffman⁽¹⁷⁾ enthusiastically stated that the erect spot films were the only films to demonstrate stones in nearly 25 per cent of a large

series. Our experience with erect fluoroscopy and spot filming—which we do routinely in all cholecystographic examinations — approximates that of Feldman.

Interpretation of films

Inferences concerning gallbladder function deserve to be made cautiously. Nonvisualization does not necessarily mean nonfunction, and certainly every patient whose gallbladder fails to be opacified should be re-examined, by either the oral or intravenous route. The extrinsic causes of nonvisualization are manifold and have often been catalogued⁽¹⁸⁾. Failure to ingest the tablets, nonabsorption due to diarrhea, obstructive jaundice, and severe liver disease are the commonest. In regard to nonvisualization and nonabsorption, the "colonic trace" left by Telepaque in 97 per cent (22) is a positive advantage, indicating that the tablets were at least ingested. Acute pancreatitis deserves attention as a cause of nonvisualization, both by oral and by intravenous methods⁽¹⁹⁾.

While in general there is a rough correlation between degree of opacification and gallbladder function, this relationship applies only in large series and does not hold in the individual case. Wickbom demonstrated that only one third to one half of poorly visualized gallbladders will show significant pathologic changes in the wall, and stated that poor filling is not by itself a sufficient indication for surgery⁽²⁾.

Inferences drawn from the degree of contraction after a fatty stimulus are of little significance. The cholecystographic medium may *itself* inhibit contraction, as with Priodax^(18a). Shapiro^(18b) and others have stressed the lack of significance of "sluggish" or "delayed" emptying as a primary sign of cholecystic disease, and have listed the numerous extrinsic factors that may affect emptying. The major purpose of the fat stimulus is, or should be, to reduce the volume of opacified bile in the hope of thereby increasing the visibility of previously masked stones. It would seem unwise to employ the fatty stimulus when stones have already been demonstrated; not only has the purpose of the examination been achieved, but the remote possibility of forcing a stone into the cystic duct exists.

Demonstration of the bile ducts is widely heralded in pharmaceutical advertising and

can be obtained in up to 95 per cent of cases examined by Telepaque or Teridax. However, visualization is usually incomplete, and rarely of diagnostic importance, unless a large number of post-fat films is made. If the gallbladder is opacified, the cystic duct must be, and the common duct is, in all probability, patent. Duct visualization cannot be considered an indication for the fatty stimulus, particularly since the advent of intravenous cholangiography.

The fatty stimulus is of value when a patient is to be re-examined after initial non-opacification. One can then be certain that any degree of physiologic stasis⁽²⁰⁾ has been overcome before re-examination.

As Dr. Nathan Womack of our institution has said, the current population expansion and the increasing number of elderly and aged persons make it likely that gallstones are being formed more rapidly than they can be removed by all the surgeons in the country. It therefore appears that oral cholecystography will be more and more with us in the years ahead.

Summary and Conclusions

1. Intravenous cholangiography has not displaced the oral cholecystogram as the basic method of gallbladder examination.
2. The most satisfactory oral cholecystographic medium is Telepaque; the 2-Gm. dose is probably adequate for all but the most obese patient.
3. Wider incorporation into cholecystography of the lateral decubitus film or preferably erect spot fluoroscopy is recommended.
4. Conservative interpretation of apparent abnormalities of function is suggested.

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* * *

Evaluation of Postoperative Cholangiography

ROBERT J. REEVES, M.D.*

DURHAM

The value of cholografin is twofold.

1. Search for remaining calculi.
2. Diagnosis of biliary duct strictures.
3. Attempt to differentiate pancreatitis.

It is well recognized that residual common duct calculi account for a high percentage of postcholecystectomy pain. Intravenous cholangiography has been widely used in the search for these calculi. We believe a lot of this work could be avoided if a post-operative cholangiography study were done in all cases.

It has been shown by several writers that the majority of strictures of the bile ducts are postoperative, following cholecystectomy. Only a few cases were thought to be secondary to infection. Strictures like ball valve stones produce a partial obstruction and are often difficult to detect.

The incidence of visualization of the biliary passages following injection of Cholografin is of little value unless criteria for the selection of patients are stated. If possible, laboratory studies should be available. An

examination is usually not done when the bilirubin is more than 3 mg. per 100 cc. In the absence of laboratory data we usually do not do the examination in the presence of clinical jaundice.

The technique and preparation of the patient for examination is very important. When possible, the patient should be placed on a high fat diet for one day preceding the examination. The colon should be well cleared of solid material before the study. The patient is examined in fasting state. A 1-cc. ampule is present for skin testing, but we have found this to be of little value. We do check the patient, however, and no severely asthmatic or allergic patients are subjected to cholangiography. For complete evaluation of the biliary system the examination is carried for two hours. Morphine is not employed, since it produces closure of the ampulla, which may be misleading.

The results in complete obstruction are very gratifying. If there is little liver damage, the common duct will be visualized. In the cases of partial obstruction, film evaluation is more difficult. Occasionally there is very poor visualization, but if the bowel is

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well cleared out, the opaque media is seen in the duodenum.

In final evaluation, one must differentiate at times between pancreatitis and partial or complete obstruction. Occasionally, malignant changes in the region of the common bile duct may be made in some

instances before the usual radiographic signs become evident.

We believe the combination of preoperative intravenous study of the nonfunctioning gallbladder and a routine, immediate postoperative cholangiographic study will prevent many of the present day postcholecystectomy syndromes.

* * *

Operative Cholangiography

JAMES F. MARTIN, M.D.*

WINSTON-SALEM

Cholangiography refers to the radiographic study of the biliary tree with opaque media. Mirizzi⁽¹⁾, in 1931, reported on the roentgenographic visualization of the biliary ducts in the operating theatre after the common duct had been opened. The full potential and importance of the examination was not immediately appreciated. Norman⁽²⁾, in 1951, reported on an extensive experience with the procedure at the University of Lund and stressed the importance of a complete examination of the biliary system before and after surgical intervention. The purpose of this presentation is to discuss the use of cholangiography in the study of the biliary duct system during and after surgery.

Phases of Cholangiography

Norman⁽²⁾ divides operative cholangiography into three phases in relation to the surgical exploration of the biliary system. Each method has a specific and important part in the proper evaluation of the status of the biliary tree.

- A. *Primary cholangiography*: Roentgen examination during the surgical procedure but before intervention on the choledochus.
- B. *Control cholangiography*: Roentgen examination after instrumental exploration of the bile passages.
- C. *Postoperative cholangiography*: After operation the contrast media is introduced into the ductus choledochus through an indwelling rubber tube.

Primary cholangiography refers to the study of the biliary tree prior to surgical

intervention by inserting a catheter or cannula into the cystic duct, injecting an opaque medium into the cystic and common ducts, and obtaining radiographic studies. It frequently provides information which may determine the success or failure of the surgical procedure. The importance of the method is emphasized in the identification and localization of calculi, obstructive lesions, strictures, and aberrant ducts. Hughes and colleagues⁽³⁾ have stated: "Any indication for duct exploration is an indication for cholangiography."

Control cholangiography refers to the roentgen examination after instrumental exploration of the bile passages. It serves the purpose of permitting an evaluation of the procedure and especially in determining whether previously identified calculi have been removed. It aids in the localization of calculi which may have migrated during the process of manipulation and exploration, and further delineates pathologic processes for a complete examination and therapy.

The postoperative cholangiogram may be carried out several days after the surgical procedure, and consists of injecting opaque media through an indwelling T tube in the choledochus. It may be repeated one or more times and performed in a more leisurely fashion, with greater thoroughness. The opaque media must be injected slowly in order not to produce spasm of the sphincter of Oddi and overfilling of the pancreatic duct. It may outline stones which have migrated after surgery or have been inadvertently overlooked. It may demonstrate the status of an anastomotic procedure or the function of the sphincter of Oddi.

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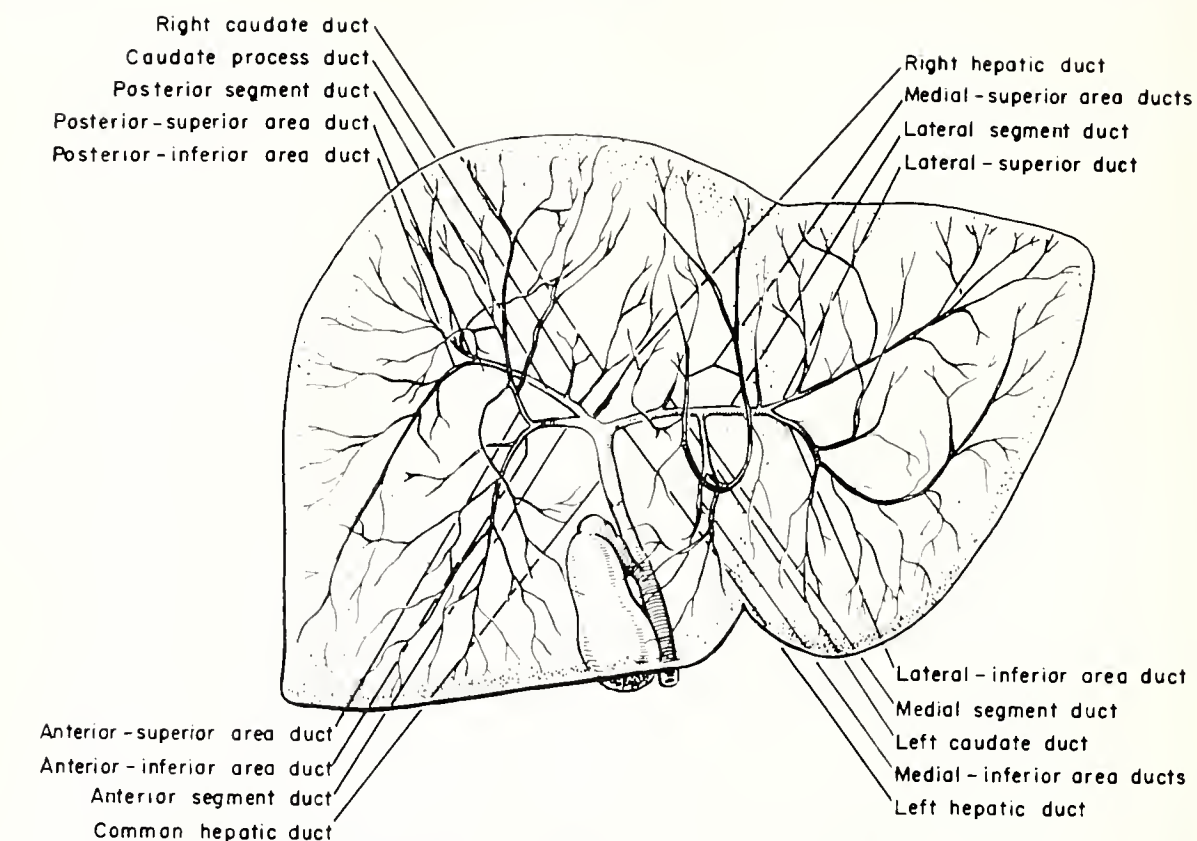


Fig. 1. Hepatic Ducts. Diagrammatic presentation of the anatomy of the intrahepatic biliary system. (Adapted from Healey and Schroy⁽²⁾.)

Hughes and others⁽³⁾ have reported 93.3 per cent accuracy in demonstrating calculi not found at previous surgical exploration. The incidence of false positive and false negative examinations is not given.

Techniques

Aqueous Urokon, in a concentration of 25 per cent, appears to be a most satisfactory medium. Other aqueous media may be used. The viscosity is lower than that of iodized oil, and better mixing of the medium with the bile is obtained, permitting a better visualization of the biliary radicals. Twenty-five to 50 cc. of the material is usually sufficient for adequate visualization.

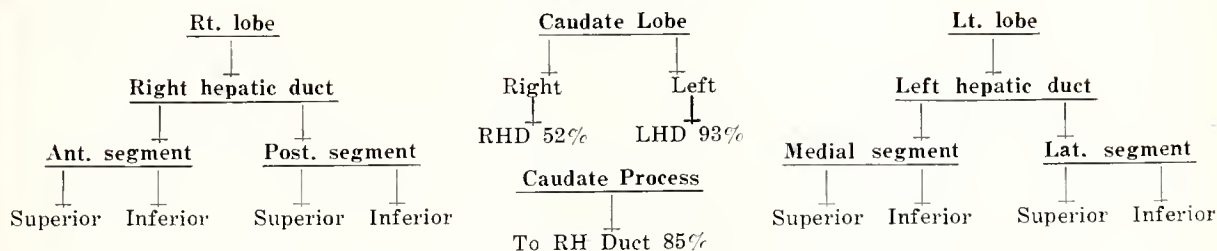
Adequate radiographic technique is necessary to obtain satisfactory film studies at the operating table. Provisions must be made for an x-ray apparatus above the operating table and a cassette tunnel on the surgical table. Ideally, anterior-posterior and oblique projections are preferred. The success of the procedure at operation depends upon the full cooperation of the surgeon, anesthetist, and radiologist.

The oblique films provide a means of viewing the intrahepatic ductal system in two perspectives and increase the probability of identifying intrahepatic abnormalities. Rapid processing of the films is necessary in order to conserve time.

Anatomy

Healey and Schroy⁽⁴⁾ based their study of the intrahepatic bile ducts on the biliary drainage of this organ and report their findings in the study of 100 cases (fig. 1). The liver is composed of two major lobes divided by a large lobar fissure. Each lobe is further subdivided into two segments by segmental fissures. The left lobe is composed of medial and lateral segments, and the right of anterior and posterior segments. These are drained by second order ducts (those of the first order being the right and left main hepatic ducts). Each of the four segments may be further subdivided according to the biliary drainage areas into a superior and an inferior area. These smaller segments are drained by ducts of the third order. Each segment has

Table I*
HEPATIC DUCTS



Diagrammatic Presentation of the Anatomy of the Intrahepatic Biliary System

*Adapted from Healey and Schroy⁽⁴⁾.

its own blood supply and bile duct. The caudate lobe ducts empty into both the right and left hepatic systems and are not properly a part of either the right or left lobe. The authors have never observed any communication through functional anastomoses between the right and left hepatic duct system in the region of the caudate lobe. Aberrant segmental ducts are identified occasionally, and drain areas of the liver independently, and the authors designate these as aberrant rather than accessory in function. A subvesical duct lies superficially in the gallbladder bed and occurred in approximately 35 per cent of their cases.

Many variations are encountered in the formation of the second and third order ducts within the liver and are beyond the scope of discussion in this presentation. The diagram presented represents the most common distribution of the first, second, and third order ducts encountered in their series.

The reader is referred to the original paper of Healy and Schroy⁽⁴⁾ for a complete study of these variations.

It is frequently difficult to determine whether a calculus in the larger biliary ducts is intra- or extra-hepatic in location. This could be determined if the hepatic exit of the right and left hepatic ducts were dissected free at operation and marked by an opaque marker or clip. Considerable variation is encountered, but in general the portions immediately below the large segmental ducts may be regarded as extra-hepatic in location.

Pathology

Calculi represent the most common pathologic condition encountered in the cholangiographic study. Norman⁽²⁾, in 195 cases of choledocholithotomy, found hepatic stones

in 46 (24 per cent) and in 31 (60 per cent) of which the stones were definitely within the intrahepatic radicles. His experience included 875 cases of surgery on the biliary tree.

The roentgen signs of biliary calculi are tabulated below:

1. Direct: Oval or round filling defect
2. Indirect: Incomplete filling or obstructing of a branch
3. Shifting shadows: Filling defects.

Other pathologic conditions may produce similar defects, and the following table represents other factors to be considered:

Differential diagnosis (Norman)⁽⁴⁾

1. Filling defects
 - (a) Air bubbles
 - (b) Mucous floccules
 - (c) Blood clots
 - (d) Tumor
 - (e) Cholangitis
2. Incomplete filling of a duct
 - (a) Other disease of the biliary tract
 - (b) Mechanical factors
 1. Obstructed T tube
 2. Poor placement of T tube
 3. Unusual length of T tube
 4. Oily media

Case Reports

The following case reports represent cholangiograms demonstrating some of the problems encountered in biliary tract surgery and radiographic study:

Case 1

A 32 year old woman, who was referred to the North Carolina Baptist Hospital with a one-year history of epigastric pain which radiated to both costal margins and was accompanied with nausea and vomiting, but was without jaundice, fever or melena. The cholecystogram failed to visualize the gallbladder on two occasions. Surgical exploration



Fig. 2. (Case 1) A. Operative cholangiogram with aqueous medium demonstrating a round filling defect in the distal portion of the ductus choledochus which proved to be a calculus. B. Postoperative cholangiogram with iodized oil demonstrating the common duct to be normal. The intrahepatic radicals are poorly filled.

revealed multiple cholesterol stones in a small gallbladder. The operative cholangiogram with aqueous media demonstrated a solitary 5 mm. stone, partially obstructing the distal portion of the common duct, which was removed (fig. 2). The common duct was dilated at surgery.

Two weeks after surgery a postoperative T tube cholangiogram with an oily medium demonstrated a normal common duct and hepatic duct. The postoperative course was uneventful.

Case 2

A 37 year old white man was admitted to the North Carolina Baptist Hospital on June 13, 1955, with a history of chronic cholecystitis and recurrent pancreatitis. A cholecystectomy had been performed in 1947. There was a gradual and periodic recurrence of symptoms with colic, leading to choledocholithotomy in December of 1952. Exporation of the common duct in June of 1953, because of jaundice and acholic stools with colic, revealed sand and debris in the common bile duct. Several attacks of pain followed, and on one occasion the serum amylase determination was 1,200 units.

The patient has been admitted to the North Carolina Baptist Hospital nine times between June 13, 1955 and June 29, 1957 because of recurrent epigastric pain and calculi in the biliary duct system. Surgical exploration of the ductus choledochus and hepatic ducts with removal of calculi was performed on three occasions. Cholangiography, operative and postoperative, was performed on 20 different occasions. Each revealed evidence of calculi in the

biliary duct system, especially in the left hepatic duct, despite various attempts at removal and numerous irrigations with ether and chloroform. The T tube was removed on July 15, 1957, despite the presence of evidence indicating persistent calculi. The patient has had one hospital admission since then because of epigastric pain, nausea, vomiting, and moderate epigastric tenderness.

This patient illustrated the clinical and surgical problems of intrahepatic calculi.

Case 3

The patient was a 62 white woman, with a history of cholecystectomy performed in 1950. In 1951 she entered the hospital with the diagnosis of cholangitis with chills, fever, jaundice, and several episodes of right upper quadrant pain lasting several days. Hepatic enlargement was identified in 1952. A choledochotomy was performed in 1955, at which time a T tube was inserted into the common duct. This was followed by a rather stormy hospital course, and the T tube was thought to be blocked.

The patient was admitted to the North Carolina Baptist Hospital in February, 1956, at which time a T tube cholangiogram demonstrated numerous calculi in the intra- and extra-hepatic radicals (fig. 4). The length of the distal end of the tube did not permit an accurate visualization of the hepatic and common ducts, and stricture formation was suspected in the common hepatic duct. A choledocholithotomy was performed, and multiple calculi were removed from the common and hepatic ducts. The T tube was reinserted in the common

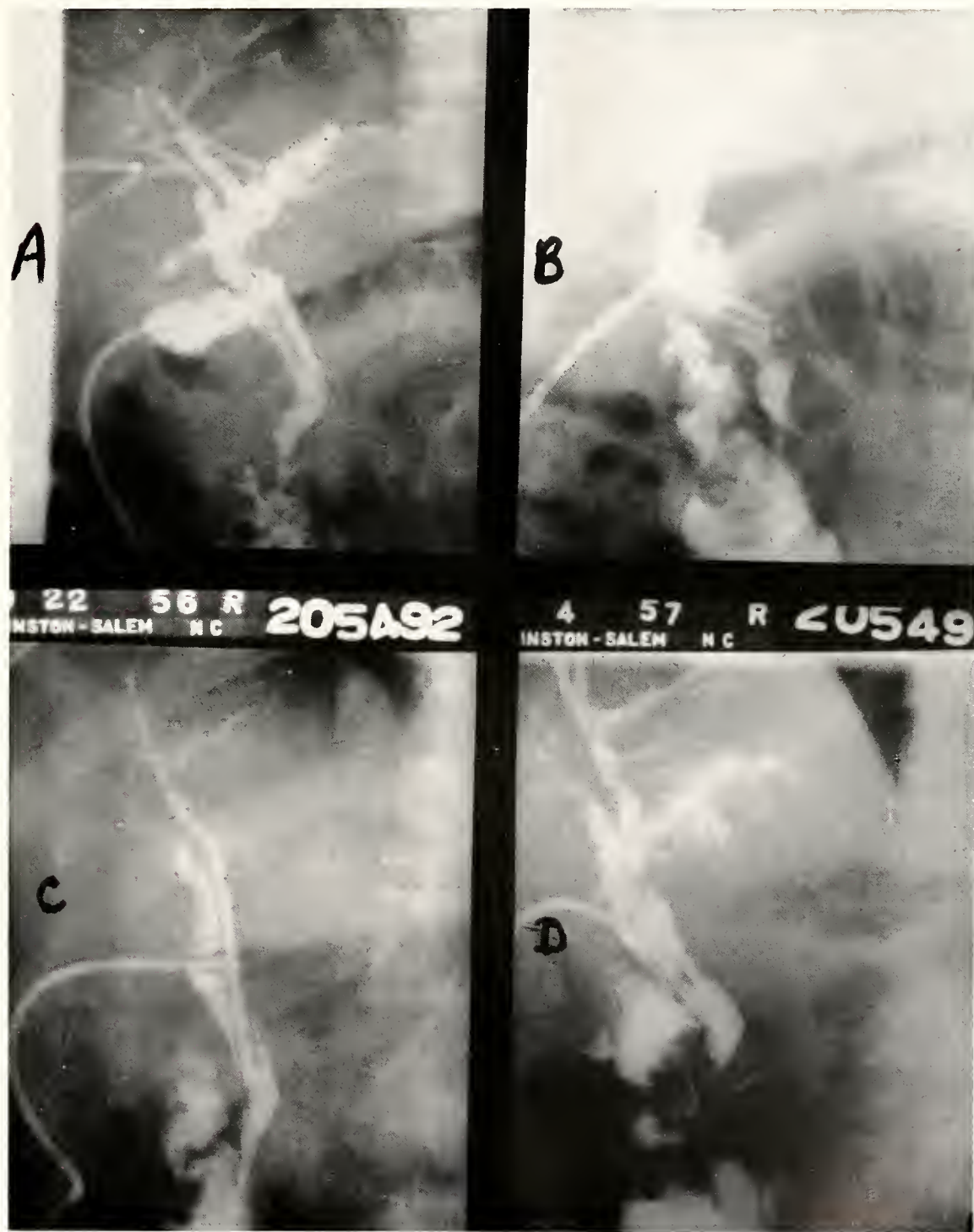


Fig. 3. (Case 2) A series of postoperative T tube cholangiograms demonstrating all of the various radiographic signs of calculi in the biliary ducts. Poor filling of the left hepatic duct due to improper placement of the T tube is demonstrated in C.

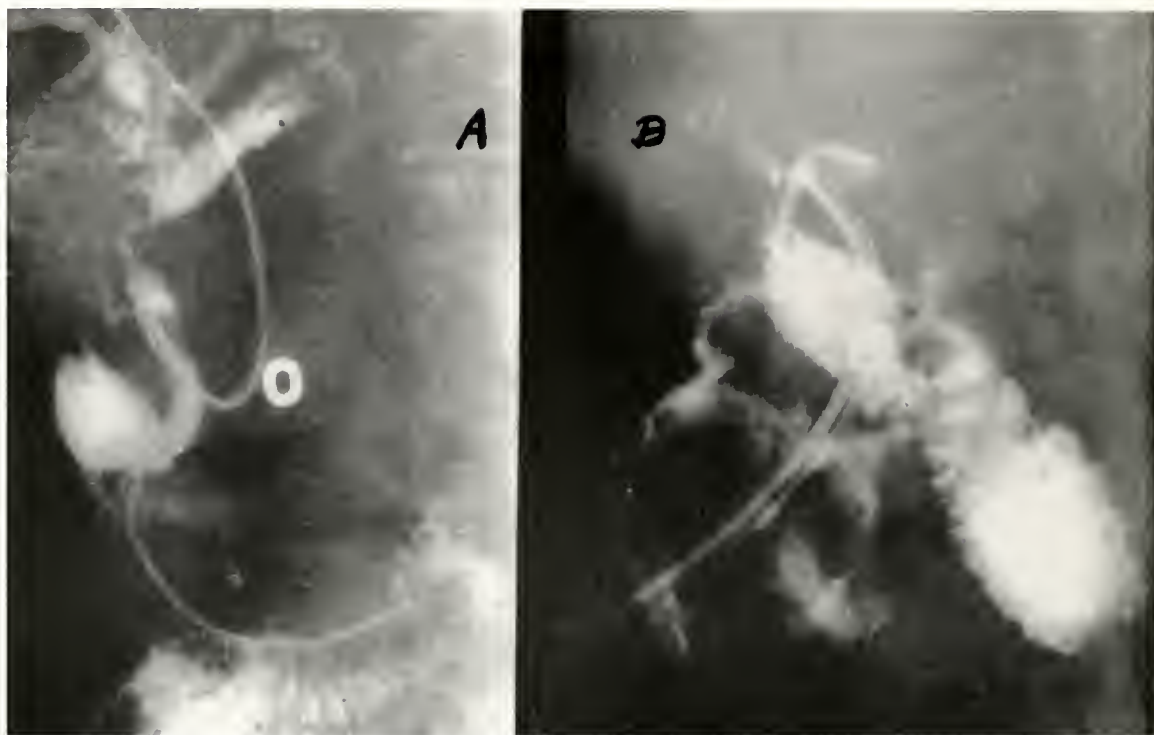


Fig. 4. (Case 3) A. T tube cholangiogram demonstrating the presence of numerous intrahepatic duct calculi. The distal limb of the T tube extends well into the duodenum. The hepatic duct is not demonstrated and the possibility of a stricture is suggested. B. Replacement of the T tube with nonvisualization of the hepatic and intrahepatic ducts. There is also evidence of extravasation of opaque medium into the peritoneal cavity, possibly from the misplaced proximal limb of the T tube or from a duodenal fistula.

duct (fig. 4B), and a cholangiogram failed to demonstrate filling of the hepatic and intrahepatic ducts. Spill of the opaque medium into the peritoneal cavity was evident from the misplaced proximal limb of the T tube.

The postoperative course was stormy, and the patient expired approximately one month after the operation. The postmortem examination revealed multiple calculi in all of the biliary ducts, chronic cholangitis with secondary biliary cirrhosis, and a subhepatic abscess with peritonitis.

Comment

The radiographic evaluation of the biliary tree has proved to be a valuable and simple method in the study of various pathologic conditions before and after surgery. Operative cholangiography is especially useful when calculous disease of the gallbladder is discovered, and should be used to exclude the presence of other calculi in the hepatic duct system. Case 1 demonstrates the value of this procedure. Adequate visualization of the entire biliary system is important in determining the presence and location of the calculi within the ducts if surgical removal is to be accomplished. This appears to be a more accurate means of identifying

calculi than the commonly used techniques of palpation, exploration, and probing of the ducts. Adequate cholangiographic study frequently obviates unnecessary exploration of the biliary duct system and reoperation. Hughes and others⁽³⁾ found an incidence of 26.8 per cent in which hepatic and common duct calculi were missed at the first surgical exploration. These were demonstrated by postoperative cholangiograms in all but one case, and all were verified at surgery.

It has not been difficult at surgery to extract stones from the common hepatic duct and the ductus choledochus, but the presence of calculi within the intrahepatic ducts remains a problem. A thorough knowledge of the anatomy is frequently helpful in locating the calculi, but not uncommonly the devious and acute angulations of the segmental intrahepatic ducts prevent their removal by surgical means. Case 2 illustrates the magnitude of this problem. The treatment of intrahepatic calculi remains an enigma. The role of the formation and migration of intrahepatic duct calculi deserves further study, especially in relation to the postcholecystectomy syndrome.

Summary

The three phases of operative cholangiography are briefly discussed in relation to the surgical approach to calculous disease of the biliary duct system.

A summary of the anatomy of the hepatic and intrahepatic ducts as described by Healey and Schroy⁽⁴⁾ is presented.

The role of the radiologist, surgeon, and anesthetist is briefly reviewed and stressed as a cooperative study of the problem presented at and after surgery.

Radiographic studies of calculous disease

in the ductus choledochus, the hepatic duct, and the intrahepatic ducts are presented.

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Abstract of Discussion

Dr. Isadore Meschan (Winston-Salem): In order to open the discussion, we have formulated some questions regarding various problems that might arise in relation to these studies. First: What procedure should one follow in relation to the management of a patient who has recurrent biliary colic following cholecystectomy?

Dr. Reeves: I presume the tube is out. In our institution we use the following procedure. First, we probably make a film to see if there are opaque calculi. The clinical studies have probably been done already. If not, we suggest a bilirubin determination and liver function studies. If the latter are within normal limits and the bilirubin is not too high, we would probably do a cholangiographic study and follow it through at 15—or sometimes 20-minute intervals—the first hour. In the normal patient the Cholografin will have passed by the first or second film. Since no shadows will be seen in the duodenum, we run the 15-minute interval film to look for persistent calculi.

Dr. Meschan: Dr. Martin, is there anything you would like to add to that?

Dr. Martin: The etiology is the important question. Cholangitis, for example, might present a different therapeutic indication. It is also important to find out from the surgeon whether or not he explored the common duct in operating, and what he found if he did. One of the most important objectives in any case is to try to rule out disease elsewhere.

Dr. Waldemar Sternbergh (Charlotte): We have been dissatisfied with Cholografin. Does the speed of injection make a difference?

Dr. Reeves: I think it does. At first some people thought it should be given very slowly, but we complete the injection within 30 seconds. We first use an ampule, either intravenously or subcutaneously, for testing. But of course Cholografin is not 100 per cent accurate, by any means. As Dr. Martin mentioned a few moments ago, there are other causes for liver damage and for secretion and excretion of the drugs. That is one of the largest problems we have to consider: Is the liver

damage due primarily to biliary obstruction or to other causes?

Dr. John Ogden Lafferty (Charlotte): Dr. Reeves said that frequently these examinations are not satisfactory. In what percentage of the cases are the results satisfactory?

Dr. Reeves: I would say that in 25 or 30 per cent of the cases that have been properly worked up and in which liver disease has been ruled out. If many or all of the cases were clinically diagnosed as biliary colic, I think the percentage would drop, because often the disorder is not due to biliary obstruction primarily but to other causes.

Question from the floor: I would like to know if any antihistaminics are being used in conjunction with this material. Some of my colleagues are using these agents with their neurotic patients to reduce the reactions to surgery. I wonder if any of you gentlemen have used these with gallbladder disease.

Dr. Martin: We haven't used it.

Dr. Meschan: I don't rely on antihistaminics—certainly not in the presence of a known allergy.

Dr. Reeves: We differentiate the case first. We don't use antihistaminics or Cholografin in severe asthmatic conditions. The drug companies have mentioned as one of the contraindications in all patients severe allergy or asthma or a bronchial disease.

Dr. Meschan: The next question is: What procedure should one follow in a patient who has intermittent episodes of vague discomfort in the right upper quadrant following cholecystectomy, with no definite relationship to meals?

Dr. Philip M. Johnson (Chapel Hill): This symptom constitutes the indication for a thorough workup. There are a number of diseases that simulate biliary tract disease. A patient having this complaint probably needs an intravenous cholangiogram, but the study should go on to include the upper gastrointestinal tract, as well as the renal system. It is entirely possible that the problem is in no way related to the biliary tree.

Dr. Martin: I certainly agree. These symptoms are not specific by any means. The disturbance has

two features: colic, and symptoms of the upper gastrointestinal tract.

Dr. Meschan: Would you comment on the frequency, say, in patients who have stones but perhaps no definite history of colic prior to operation? How many of these patients do you think would continue to have symptoms after removal of the stony gallbladder?

Dr. Martin: The Swedish authorities on this subject found that between 20 and 25 per cent of patients undergoing removal of a normally functioning gallbladder have postoperative symptoms whether stones are found in the common duct or not. That introduces a new concept, at least to me. Being interested in the T tube cholangiogram, I wonder if one is justified in removing a normally functioning gallbladder because of stones. I wonder if we shouldn't reconsider merely removing the stones, and if the gallbladder appears healthy, leaving it in. I know that is not the usual procedure, but I think we should at least consider it. I don't know whether it would relieve the symptoms or not.

Dr. Meschan: Surgeons always raise the question of cancer in association with gall stones.

Dr. Martin: True; but it would be easy to open the gallbladder and find out.

Dr. Reeves: I think it would be difficult to persuade a surgeon to leave the gallbladder in. The greatest problem we have is the differentiation of pancreatitis. I believe that if a thorough postoperative cholangiographic study were done, it would reduce the number of patients who come back and have to have these studies a month later.

Dr. Sternbergh: Our surgeons are demanding more operative cholangiograms. Is it best to do them before removing the gallbladder?

Dr. Martin: The more complete the study, the better the result. I believe we should adopt the technique of the Swedes. They insert a special cannula into the cystic duct and make the first cholangiogram by injecting the media into the common duct before removing the gallbladder or touching the biliary tree. This is the one opportunity for evaluating the biliary tree in its existing state.

Injection has to be slow. The technique has to be exactly right. It is necessary to make a complete film study. One biliary radical can overlie another and the stones still be obscured. The surgeon wants to know whether there is evidence of stones in the gallbladder in order to evaluate the biliary tree before he ever touches it.

Dr. Sternbergh: Is the cannula you mentioned available in this country?

Dr. Martin: I don't believe so. You can substitute a needle or polyethylene tube.

Dr. Sternbergh: It is inserted into the cystic duct?

Dr. Martin: Yes. This study would also show a biliary radical coming down and emptying into the cystic duct or one coming down and joining the cystic duct as it joins the hepatic duct. In that way it is possible to visualize accessory or aberrant ducts, and the surgeon will know then what ducts to tie and what not to tie. Many surgeons say that after they have removed the gallbladder, bile drains for several days. I don't know whether that is correct or not. The only chance for determining the site of the leakage is to do a T tube cholangiogram before the surgeon touches the bile duct system. The surgeon will be interested in only one thing: he wants it done in such a way that it will not delay the operating time. Our job is to work out the technique and have a dark room and a good machine available. When we have accomplished that, we can convince the surgeon of the importance of the procedure.

Dr. Sternbergh: You say that the duct may be occluded by a stone. How can you tell whether the duct is just not there or whether it is occluded by a stone?

Dr. Martin: I believe by the figuration of the termination of the duct. I think also that if you saw a duct terminate in one area and a mass of liver beyond that which had no duct system at all, this would be good presumptive evidence of an obstruction. The duct system within the liver is very intricate and interesting, as demonstrated by Healey and Schroy.

There is a growing appreciation of the therapeutic significance of the medical interview *per se*. Thus Ashe has discussed the therapeutic significance of talk, and, conversely, its harmful significance. He brands as one of the seven signs of medicine the mental cruelty which commonly arises through saying too much to a patient and thus adding to his anxiety, or by saying too little and causing fear of the unknown—Editorial: The Therapeutic Value of Talk, *Canad. M. A. J.* 77:888 (Nov. 1) 1957.

Concomitant Individual and Group Psychotherapy

ROBERT N. HARPER, M.D.

CHAPEL HILL

Group psychotherapy has come of age. A technique at one time thought to be a poor man's psychotherapy is now recognized as a therapeutic technique having unique qualities all its own. In several situations such as therapy with alcoholics and their wives or husbands, and with antisocial teenagers, the group process is felt to be superior to individual psychotherapy. Recently several reports of concomitant group and individual psychotherapy have appeared. For the most part this has been an attempt to increase the therapeutic effectiveness of individual psychotherapy by utilizing some of the unique benefits of the group approach. Powdermaker and Frank⁽¹⁾, however, point out that primary group therapy can be made more efficacious by adding individual sessions to allow the patient to work through acute emotional disturbances which seem to threaten his relations with others in the group.

Hulse⁽²⁾ has reported the following benefits achieved by the use of both group and individual therapy in private practice:

1. Combined therapy increased transference and catharsis.
2. Stimulation obtained in groups spills over to individual sessions.
3. Integration of insight obtained in individual sessions is reinforced by the group process.

Edrita Fried⁽³⁾ pointed out that group therapy stimulates productivity in the individual sessions so that the total therapeutic plan progresses much faster.

Material

This report deals with experience in concomitant individual and group psychotherapy with psychiatric patients in a general hospital over a three-month period. These patients were hospitalized in the psychiatric wing of a general hospital* for from three to five weeks. During this time they lived on the ward in single or double studio-type rooms. They participated in planned occupational therapy daily on a separate floor. In addition, there was recreation, including

games, movies, television, and athletics. Meals were served in a dining room on the ward. Visitors were allowed at any time after the patient's tenth hospital day.

Two psychiatric residents were assigned to this 18-bed ward and the patients were in turn assigned to one or the other resident in rotation as they entered the hospital. Each resident was responsible for the administration and treatment of one-half the patients on the ward.

Most of the patients suffered from one of the neuroses. However, there were 6 patients who had depressions of psychotic proportions and 1 patient with chronic undifferentiated schizophrenia. The diagnostic categories represented, and the number of patients in each, are shown in table 1.

Table 1
Diagnostic Categories

	Male	Female
Anxiety reaction	2	4
Depressive reaction	5	4
Psychotic depressive reaction	2	4
Conversion reaction		2
Passive aggressive personality		3
Psychologic gastrointestinal reaction	1	
Drug addiction (Demerol)		1
Adjustment reaction of adolescence		1
Adjustment reaction of late life	1	
Schizophrenic reaction, chronic undifferentiated type		1
Totals	11	20

Method of Treatment

The treatment was primarily psychoanalytically oriented psychotherapy. However, electroshock was given to 8 depressed patients, and 2 patients participated in a double blind research project involving Serpasil, deoderated tincture of opium, and placebo. Both residents saw their patients in daily psychotherapeutic interviews. In addition, one of the residents saw his patients in group therapy three times per week.

Objectives of group therapy

The group therapy was undertaken with the following objectives in mind:

1. To improve therapeutic results by coordinating it with individual psychotherapy.
2. To help new patients become oriented to the psychiatric ward and psychiatric

*North Carolina Memorial Hospital, Chapel Hill.

treatment, which for many was quite different from what they expected to find in a general hospital.

3. To offer support and encouragement to the patient by allowing him to discover that fellow patients were kind, understanding, rather nice people, and not "nuts" or crazy folks. It was felt that patients would be helped by realizing that other patients could have symptoms like theirs and still be sane, worth-while people.
4. To help make preconscious and unconscious emotional conflicts clear.
5. To serve as a training experience in group psychotherapy for the psychiatric resident.

Group techniques

The group psychotherapy meetings were held three times per week in a conference room adjacent to the ward. Each lasted 50 minutes. The group sat around a long conference table. The atmosphere was informal and spontaneous discussion was encouraged. New patients joined the group as soon after entering the hospital as the resident completed their initial work-up. They left the group as they were discharged from the hospital. The group varied in number from 3 to 9, with an average of 7 persons. Of the 31 patients seen during this period, 11 were men and 20 women. Group therapy was not compulsory, although each patient was invited to attend, and, as a matter of fact, everyone did.

The sessions were not rigidly structured. Except for introductory remarks concerning purpose and organization, the therapist was completely nondirective. There were no lectures. The patients were encouraged to direct remarks to each other, the therapist, or the group in general. No subject was barred from discussion as long as it was of interest to the group.

The position of recorder was filled by a graduate student in sociology who was at that time engaged in a study of sociologic aspects of the patients' life on the ward. He sat in the group circle and kept written notes of the verbal exchanges and emotional reactions. From time to time one of the group would try to bring him into the discussion, but, for the main part, he was able to remain a nonverbal observer. On one or

two occasions group members questioned the recorder's function. These questions were answered on each occasion by other members of the group explaining the recorder's position.

Evaluation of Objectives

Coordination with individual psychotherapy

Group therapy offered an excellent setting for observing the patient's relationship with other people. Patients frequently exhibited attitudes and behavior in group meetings that were not apparent in other settings. One woman assumed the role of defender of the hospital and champion of psychological medicine, while another became the court jester. In neither case were these roles apparent in individual sessions. This difference in a patient's reaction was often helpful in understanding the patient and his problems.

It was with some surprise that patients were repeatedly observed discussing material in group therapy that they seemed unable to handle in individual sessions. Perhaps this was because, as Scheidlinger⁽⁴⁾ suggests, the group offers emotional support, protection, and a feeling of belonging that enhances the patient's self-esteem. For example, the group setting afforded opportunities for the patients to express hostile feelings toward the hospital and the therapist which they had been unable to express on their own in individual therapy. Often this was done indirectly by interpreting some casual act of another patient as being hostility, or by agreeing too enthusiastically with someone else's hostile remarks, and so forth. These emotions could be noted by the therapist and interpreted in group or private sessions. This fact suggests that some patients feel threatened by the intense, focused one-to-one relationship of patient-therapist, whereas they feel less inhibited in the more diffuse group situation.

Orientation

New patients were told of hospital policy, ward routine, and the like on admission. Their questions in group and private sessions, however, revealed that much of this information had not been assimilated. Group discussions repeatedly exposed misunderstandings and misconceptions, and materially helped the patient understand

his new surroundings and the reasons for the procedures. In group sessions questions concerning policy or hospital routine by one patient would often bring forth varied responses from the group, indicating that these items had been improperly understood in spite of the patient's statement in individual therapy that he understood completely. Apparently there is less resistance to regulations when presented by one's peers than when the regulations are presented by an authority.

Most of the patients came to the hospital expecting conventional medical or surgical treatment and found psychiatric methods difficult to understand or accept. Acceptance and understanding were greatly facilitated by discussion in the group with older patients, many of whom expressed great satisfaction with the benefits they were receiving from psychiatric treatment.

Universalization

The initial reaction of many patients on entering the ward was frank surprise that "mental patients" seemed so "normal." Often a patient regards himself as queer and different because he has an emotional disorder. He feels that his own appearance reveals to all observers the presence of the anxiety within him. It has been repeatedly helpful for these patients to know other patients with similar problems and to realize that they are not necessarily queer or odd. In group discussions patients often use, with obvious comfort, such expressions as "we are all in the same boat." The sharing of experiences and ideas was a prominent part of group work and continued outside group meetings. The group was consistently tolerant and non-judgmental, although from time to time some group members would give very elaborate and detailed advice.

Clarifying unconscious emotional conflicts

On several occasions the group made interpretations that were accepted and utilized by the patient. For example, a woman told the group of her difficulties with her daughter-in-law. The group took up this problem and in the resulting discussion pointed out that the mother was unable to recognize that she was treating her son like a little boy, and that she was competing with his wife for his affection. This inter-

pretation was accepted and understood in group therapy, although it had met with great resistance in individual therapy.

Another woman had been unable to recognize her hostile feelings toward her mother-in-law until after this discussion. Later on, she was able to verbalize her hostility and, in individual therapy, came to understand its origin in displaced hostility toward her own mother, who had deserted her in childhood. Apparently there is less resistance to interpretation and clarification from fellow patients than from the authority, in this case the group leader.

Value of training for residents

The psychiatric resident who wishes to learn group techniques has a unique opportunity when seeing patients in both group and individual sessions. In such a setting he has the advantage of a better knowledge of the patient and so can appreciate the effect of group dynamics to an extent seldom realized if he is seeing the patients only in a group. In addition, he is in a position to evaluate group interaction as an aid to resocialization, the acquisition of insight, or the other goals of individual therapy.

Group therapy is a well recognized psychiatric procedure and needs no justification here. It is becoming increasingly apparent that experience in group work should be included in every good psychiatric residency program.

Comment

This experience with group therapy has led to a re-examination of some basic concepts and has pointed out several areas where a change in method or technique would be advisable.

Group participation in the project was voluntary. Although all patients participated, it is felt that voluntary attendance de-emphasized group therapy and left the patient with the idea that it was not very important. This attitude was also noted among the nurses, who initially allowed interruptions of group meetings and repeatedly had to be reminded to assemble the group for the meetings.

Better group participation resulted when the therapist was least active. Direct answers by the therapist were accepted as the voice of authority and immediately

stopped further discussion. It is felt that he should encourage participation, help encourage reticent members to express themselves, and note emotional reactions. Direct support or interpretations should come from the group, with the therapist participating actively only as much as is required to keep the group functioning.

Adequate supervision is essential if the group is to function in a therapeutic manner and the resident is to profit from the experience. Without supervision the therapist has difficulty in being objective and may become discouraged and withdraw or fall into such a trap as letting the group become a question and answer session with himself serving as the "quiz kid." It is doubtful that many residents will continue group work without the support and encouragement of close supervision.

In order to do critical, effective work, it is helpful to have a recorder in addition to the therapist. This role can be performed by someone in the related disciplines or can be used as a training device, with new residents serving as recorders before they become group therapists. In the experience described here, the recorder was able to

observe and take written notes without noticeably disturbing the group. If at all possible, both recorder and therapist should meet with the supervisor so that all points of view can be presented and utilized.

Summary

The use of concomitant group and individual psychotherapy for psychiatric patients in a general hospital has been discussed. The method used and the objectives and results of such combined therapy are described. It is felt that such a program provides a valuable training experience for the psychiatric resident and a profitable therapeutic experience for the patient.

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Sarcoidosis:

The Effects of Pregnancy and Subsequent ACTH And Corticord Therapy on the Disease

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and

WALTER SPAETH, M.D., F.A.C.P.

ELIZABETH CITY

Sarcoidosis is a generalized systemic disease of unknown etiology. Recently Michael⁽¹⁾ presented interesting and new data on the epidemiologic considerations of the condition, suggesting that it is a naturally occurring beryllium disease. Sarcoidosis is characterized by tubercle-like lesions composed of epitheloid and giant cells, but manifesting little or no caseous necrosis. Any organ may be affected, but the process is more prone to involve lymphoid tissue. Lesions also commonly occur in the

skin, bones of the hands and feet, lungs, eyes, parotid gland, spleen, and liver. Longcope⁽²⁾ reported a patient in whom sarcoidosis of the endometrium was discovered on curettage performed for uterine bleeding.

Sarcoidosis may be found in any age group, but the majority of cases occur between the ages of 20 and 40 years. The distribution is equal between male and female, and the disease is seen in both Negro and white races.

An excellent study of the clinical picture and laboratory findings was reviewed by Harrell⁽³⁾.

Sarcoidosis of the lungs, in addition to

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presenting the roentgen picture of hilar lymphadenopathy, may be diffuse parenchymally. In the early stages, disseminated, soft, discrete infiltrations are indistinguishable from miliary tuberculosis. As the lesions age, fibrosis occurs and may lead to dyspnea, cynosis, and right ventricular failure. In the majority of cases, however, the disease runs a benign course, and many cases resolve spontaneously.

During the past several years numerous articles regarding the use of both ACTH and adrenal cortical steroid hormones in the treatment of pulmonary sarcoidosis have been published. Results have been controversial, but apparently lesions have been resolved in early cases.

Sarcoidosis as a complication of pregnancy is relatively rare. Longcope⁽⁴⁾, in his vast experience with the disease, reported that he had never seen a pregnant patient with active sarcoidosis. He mentioned, however, that one of his patients did have two successful pregnancies after recovery from what appeared to be extensive sarcoid involvement of the lungs. Beacham⁽⁵⁾ also reported that he had never encountered such a case in the large group of patients in the Charity Hospital in New Orleans. Harrell⁽³⁾ mentions 2 patients who had miscarriages and children who died after birth.

Nordland and others⁽⁶⁾, in 1946, reported a case of pregnancy complicated by idiopathic thrombocytopenic purpura and sarcoid disease of the spleen. Two cases were reported by Aykan and Juskowitz⁽⁷⁾ in 1950. Subsequent reports have been published by Russell⁽⁸⁾, Donaldson and co-authors⁽⁹⁾, Berman⁽¹⁰⁾, and Gallaher and Douglass⁽¹¹⁾. Berman's case subsequently proved to be active tuberculosis 15 months after delivery, and possibly should not be considered in this study. A total of 12 cases of pregnancy complicated by sarcoidosis have thus been reported. It was the opinion of most authors that pregnancy did not influence the course of sarcoidosis and, conversely, that sarcoidosis did not interfere with the normal course of pregnancy. It would seem, then, that therapeutic abortion is not indicated should sarcoidosis be discovered early in pregnancy. Also, known sarcoidosis is not a contraindication to pregnancy.

The case report to follow is one of known sarcoidosis, diagnosed by lymph node biopsy. Initially the patient became pregnant

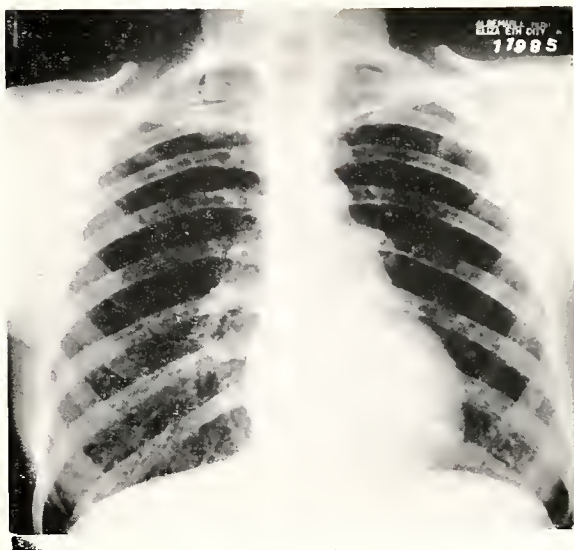


Figure 1

and improvement occurred in her pulmonary pathology. Postpartum relapse and subsequent remission induced by ACTH therapy was observed during the first two years. A second relapse occurred following a normal delivery during the fourth year and on this occasion remission was induced after the use of adrenal cortical hormone.

Case Report

A 27 year old Negro woman, para 5-0-5, was seen initially on March 11, 1952, having been referred by her local physician for consideration of vaginal hysterectomy and colpoperineorrhaphy. Four months previously she had delivered a viable infant. Since delivery she had complained of lower abdominal and low back discomfort as well as bearing down sensations in the lower abdomen, weakness, and fatigue. There was no history of chills, fever or weight loss. Examination at that time revealed the temperature to be normal, the blood pressure 110 systolic, 70 diastolic, and the weight 127 pounds. General examination was within normal limits except for a slight generalized discreet lymphadenopathy. No skin or ocular lesions were noted. Pelvic examination revealed a relaxed introitus, with a moderate cystocele and large rectocele. The cervix presented at the introitus on straining. The remainder of the pelvic findings were within normal limits.

The patient was admitted to the hospital, where a routine roentgenogram of the chest revealed a diffuse miliary-type infiltration involving both lung fields, as well as marked bilateral hilar adenopathy (fig. 1). Roentgenograms of the bones of the hands and gastrointestinal series were entirely normal. Blood studies were within normal limits except for a sedimentation rate of 42 mm. per hour corrected. Urinalysis and stool examinations were negative for tubercle organisms. Guinea pig inoculations of the sputum were negative.

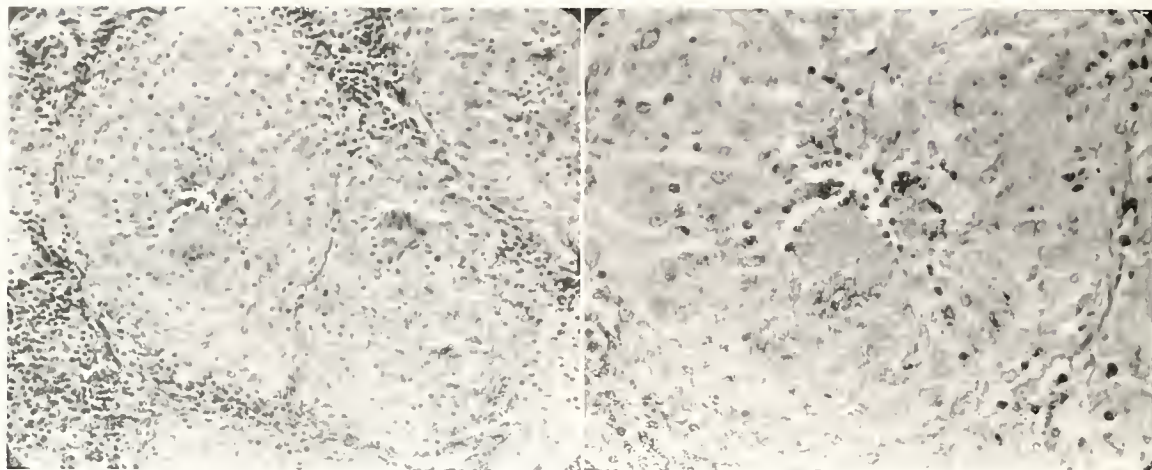


Figure 2

Sputum cultures for acid fast organisms and fungi revealed no growth. The patient was seen in medical consultation by one of us (W. S.), who made a tentative diagnosis of Boeck's sarcoid.

On March 17, 1952, a right axillary lymph node was excised for pathologic study. The pathologist's report was chronic granulomatous lymphadenitis, with tubercle formation compatible with a diagnosis of Boeck's sarcoid (fig. 2). The patient was discharged from the hospital on March 21. While in the hospital she was completely afebrile and had no systemic complaints. She was returned to her local physician with recommendations to begin a regimen of a high protein diet, supplemented by cod liver oil and regular rest periods.

X-ray examinations of the chest in May, August, and October, 1952, revealed the same pathologic picture.

The patient was again seen on December 24, 1952, at which time she stated that her last menstrual period occurred October 1, 1952. Examination revealed the temperature to be normal, blood pressure 108 systolic, 60 diastolic, and weight 130 pounds. General examination was as before, except for the presumptive signs of early pregnancy. Laboratory data remained within normal limits except for moderate anemia.

On July 30, 1953, the patient was admitted to the hospital in early labor. After one hour and 37 minutes of uneventful labor, an 8 pound 14 ounce infant was delivered by low forceps under pudendal block. Laboratory studies were again within normal limits except for a sedimentation rate of 45 mm. per hour corrected. X-ray examination of the chest and phalanges was entirely normal. The patient's immediate postpartum course was uneventful, and she was discharged from the hospital on the third postpartum day.

Examination of the infant, including roentgenograms of the chest, was within normal limits.

The patient returned on September 12, 1953, at which time she reported that she had been well except for symptoms of a mild upper respiratory

infection. For this she had seen her local physician and had received several injections of penicillin. Examination revealed her weight to be 134 pounds and blood pressure 110 systolic, 74 diastolic. Her pelvic structures were found to be involuting satisfactorily.

Again on September 29, 1953, she returned, complaining of weakness and malaise. Also, she had observed hot and cold sensations and a nonproductive cough. The temperature was normal, weight 136 pounds, and blood pressure 110 systolic, 70 diastolic. The general examination was essentially normal. A roentgenogram of the chest made on October 24, 1953, less than three months following delivery, revealed definite recurrence of findings suggestive of sarcoidosis in both lung fields. The patient was referred back to the internist (W. S.) for further therapy.

On December 8 repeat chest films revealed extensive infiltration throughout both lung fields, equally as extensive as on the initial examination in March, 1952.

On February 8, 1954, the patient was readmitted to the hospital on the medical service for further diagnostic study and treatment. She was essentially asymptomatic at the time of admission. The only abnormality noted was a diffuse infiltration throughout both lung fields on x-ray examination. Laboratory studies were within normal limits. The patient was started on 20 units of ACTH every six hours for 18 days, after which the dosage was reduced to 10 units every six hours for two days (Total dosage: 1,520 units). She was discharged from the hospital on March 5.

X-ray examination of the chest on March 12 revealed definite improvement. The lung fields appeared to be as they were during the latter stages of pregnancy.

Chest films on April 27 revealed continued improvement. Films obtained on March 9, 1955, and July 14, 1955, revealed the lung fields to be entirely clear. When seen on July 14, 1955, the patient was entirely asymptomatic. Her weight was

142½ pounds, and laboratory studies were within normal limits.

On September 10 and November 12, 1955, the patient was seen for a follow-up study. Physical examination, laboratory studies, and x-ray studies of the chest were all within normal limits.

The patient returned again on January 6, 1956, stating that her last menstrual period had occurred on November 12, 1955, and reporting the usual prodromal symptoms of early pregnancy. The temperature was normal, blood pressure 120 systolic, 70 diastolic, and weight 143½ pounds. General examination was essentially within normal limits. A presumptive diagnosis of pregnancy was made. Laboratory studies were within normal limits, and an x-ray examination of the chest revealed both lung fields to be entirely clear. She was placed on a routine prenatal regimen consisting of a high protein diet supplemented with iron, calcium, and vitamins. Monthly x-ray studies of the chest revealed the lung fields to be clear. Laboratory data remained with normal limits.

On August 28, 1956, she was admitted to the hospital in early labor. After three and a half hours of uneventful labor a 9 pound 12 ounce male infant was delivered by low forceps under propylene and oxygen anesthesia. Laboratory and roentgen findings were all within normal limits.

Examination of the infant, including chest films, was within normal limits.

The patient returned on October 11, 1956, with no significant complaints except for bearing-down sensations in the abdomen and pelvic discomfort. Examination at that time was not remarkable except for pelvic relaxation. Vaginal hysterectomy and anterior and posterior colpoperineorrhaphy was advised.

On December 6, 1956, she was admitted to the hospital for operation by one of us (W.A.P.). She was completely free of pulmonary symptoms at the time. Preoperative laboratory studies were within normal limits; however, a chest plate was reported by the hospital roentgenologist as follows: "The lung changes previously observed appears to be redeveloping since August 27, 1956. There are now numerous very small densities present throughout both lung fields." An axillary lymph node biopsy was done and the pathologist reported "granulomas compatible with Boeck's sarcoid." This corresponded with the previous pathologic report made in 1952. Because of this report operation was deferred, and the patient was transferred to the medical service (W.S.). Skin tests, sputum examination, cultures, and guinea pig inoculations were again negative for tubercle organisms.

Since ACTH had been previously used in 1954, it was decided to attempt adrenal cortical hormone therapy for this relapse. Accordingly, on December 7, 1956, prednisone (Meticortin) was begun at an initial dosage level of 10 mg. every six hours. No toxic manifestations were observed.

After one week of therapy at this dosage level, the amount of prednisone was reduced by one half. Following two weeks on this dosage, prednisone was then slowly discontinued. All therapy with the drug was discontinued on January 10, 1957. (Total dosage: 565 mg. prednisone).

Repeat roentgenograms of the chest were obtained at weekly intervals. A slight suggestion of improvement was noted one week after initiation of therapy, and by the end of the second week of treatment there was definite evidence of progressive improvement throughout both lung fields. On February 7, 1957, improvement was observed to be continuing even though therapy had been discontinued for four weeks. Clinically the patient had gained 6 pounds in weight, and physical examination was entirely normal. No abnormal laboratory tests were encountered.

Comment

In 1951 Opsahl and Long⁽¹²⁾ reported experimental evidence indicating the production of ACTH in large amounts by placental tissue. The presence of ACTH activity in placental extracts was shown by depletion of adrenal ascorbic acid, a fall in circulating eosinophils, and a marked inhibition of the hyaluronidase-enhanced spreading phenomenon that occurred after injection of placental extracts into hypophysectomized rats and mice. Jailer and Knowlton⁽¹³⁾, too, reported ACTH activity in placental extracts from an Addisonian patient.

That ACTH is produced in significant amounts by the human placenta is one of the most important recent contributions to the physiology of pregnancy. The clinical significance of this finding will doubtless develop more fully as further investigations are carried out. Nevertheless, it would seem that ACTH activity of the placenta might be a logical explanation for the frequently observed improvement during pregnancy of such diseases as rheumatoid arthritis, lupus erythematosus, asthma, and many allergic manifestations and nephrosis. Yet it should be pointed out that cases of these diseases are not always benefited by pregnancy. Not infrequently they may become decidedly worse.

It is felt that sarcoidosis might be included with this group of diseases, since in this report dramatic improvement in the appearance of the pulmonary lesions coincide with the onset of pregnancy and reoccurred promptly following delivery. Prompt disappearance of the pulmonary lesions was then effected by treatment with

ACTH and subsequently with adrenal cortical steroid.

Considerable laboratory data were procured in the detailed study of this patient. It was anticipated that certain conclusions might be arrived at, especially with regard to total eosinophil counts. However, we can only comment that the total eosinophil count remained essentially within normal limits throughout pregnancy, only to fall during and immediately following labor and then rise significantly by the third postpartum day.

It was also demonstrated that eosinopenia occurred during subsequent ACTH and adrenal cortical steroid therapy.

Summary

1. A case of pulmonary sarcoidosis with five-year follow-up is reported. Full term pregnancy and delivery occurred twice during this interval. Remission of sarcoidosis took place during the early weeks of the first pregnancy, and relapse was encountered within three months postpartum. Remission was again induced with ACTH therapy. Following a subsequent pregnancy, relapse of sarcoidosis occurred within three months postpartum. Remission was again induced with adrenal cortical steroid therapy.

2. The literature presenting evidence for the production of ACTH by the human placenta is reviewed.

3. It is suggested that the remission of the disease observed during pregnancy in this case was due to placental production of ACTH.

4. It is concluded from this study and a review of the literature of sarcoidosis and pregnancy that therapeutic abortion is not indicated if the disease is discovered early in pregnancy.

Addendum

Since this paper was presented, Maycock and colleagues have reported 10 patients whom they followed through 16 pregnancies (J.A.M.A. 164: 168, 1957). They observed that pregnancy appeared to have an ameliorating effect on sarcoidosis during the prenatal period, but that this benefit was frequently lost after delivery. They also postulated that it is possible that improvement of sarcoidosis during pregnancy may be due to the increase in the production of corticoids by the adrenal glands during gestation.

Acknowledgment

Acknowledgment is hereby made to the clinical laboratory and x-ray departments of the Albemarle Hospital, Elizabeth City, for their invaluable assistance in the study of this patient.

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... Since time immemorial, the physician has healed patients by the simple process of conversing with them. It is questionable whether the average medical student receives anything like enough training in this aspect of his work. True, from the standpoint of organic disease, the student is admirably equipped. He is taught how to take a medical history and how to make a physical examination, but he can still learn a little of the technique of interviewing. Editorial: The Therapeutic Value of Talk, Canad. M. A. J. 77:888 (Nov. 1) 1957.

Tuberculosis Control — A “Divide and Conquer” Strategy

ROBERT F. YOUNG, M.D., M.P.H.*

ROANOKE RAPIDS

When on September 1, 1939, Hitler launched his German hordes against Poland, the invading German Armies gave a terrifying demonstration of a new military technique known as lightning war. Hitler added to the suddenness and ferociousness of this new offense a series of encircling movements by his mechanical units which had the effect of completely bewildering and demoralizing the defenders before they could comprehend and effectively meet this plan of attack.

In contrast to Hitler's new strategy of warfare, as demonstrated in the Polish Campaign, England and France were committed to almost exactly the same military plan they used in the first World War—a stalemate type of battle behind massive fortifications along an extensive front.

Even before Hitler unveiled his blitzkrieg type of warfare, he demonstrated another tactic which proved to be effective in gaining for him and his Nazi Germany considerable territory. This technique, known as “Divide and Conquer,” consisted of singling out or dividing small countries, sending in his espionage personnel for softening up procedures, and then, at the strategic moment, quickly invading and taking over these countries by overwhelming forces⁽¹⁾.

Although Churchill⁽²⁾ described the Nazi regime as one “that excels all forms of human wickedness in the efficiency of its cruelty and ferocious aggression,” all the members of the Tuberculosis Control Team, including the physicians in general practice, public health personnel, and physicians specialized in diseases of the chest, whether they be on the staffs of the State Sanatoriums or in private practice, will detect in some of the early strictly military strategy used by Hitler some techniques which might well be applied to the present day control of tuberculosis. The writer refers particularly to the strategy of “Divide and Conquer.”

Results of Changing Strategy Against Tuberculosis

There was a period in North Carolina when tuberculosis was fought on a broad front in a stalemate type of battle, with the emphasis on defensive tactics and with the principal objective controlling the high death rate from this disease. Even with the coming of the Mass Chest X-ray Survey technique to North Carolina in 1945, when tuberculosis control definitely changed from a defensive to an offensive maneuver, the attack against this disease still was on a broad and nonselective basis. The effectiveness of this early broad offensive maneuver, however, was clearly demonstrated when, during the five-year period, 1945-1949, 17,125 new cases of tuberculosis were reported, as compared with only 9,848 new cases found during the last five-year period of the previous era of defensive tactics—a 73.9 per cent increase in total cases reported⁽³⁾. This mass tuberculosis case-finding offensive in North Carolina reached a peak in 1950, when 3,653 new cases were reported from all sources. The highest case rate per 100,000 (96.6) was recorded in 1947.

Factors Leading to a Selective Approach Geographic distribution of cases

An epidemiologic study of tuberculosis in North Carolina for the period 1948-1952, which I reported in 1953, revealed the average case rate for this period to be 77.6, representing a 20 per cent drop from the high of 96.6 reported in 1947. This study indicated further that the 38 counties in the coastal plain section of the state had a case rate of 98.5, compared with a rate of 68.2 in the central 34 counties and with a rate of 70.9 in the 28 western counties of the state⁽³⁾.

Data just released by the Public Health Statistics Section, North Carolina State Health Department (fig. 1), reveal that the average tuberculosis case rate for North Carolina during the most recent period of 1954-1956 declined 54 per cent from the

*Halifax County Health Officer.

NEW TUBERCULOSIS CASES PER 100,000 POPULATION
NORTH CAROLINA AND EACH SECTION,
THREE-YEAR AVERAGE RATE, 1954-1956

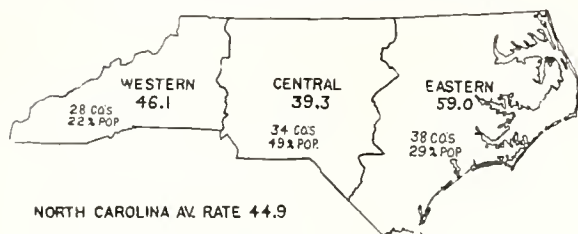


Figure 1

top rate reached in 1947, to a low of 44.9 per 100,000 population. The 38 counties in the coastal plain section still ranked first with a rate of 59, the western counties ran second, with a rate of 46.1, and the central counties declined to a low of 39.3. In other words, these recent data indicate a further differentiation between the case rates in the eastern and western counties as compared with those of the Piedmont since the 1948-1952 period⁽⁴⁾.

So far as I have been able to determine, the only comparative study of mobile x-ray case-finding activities between sections of North Carolina was reported by Smith in 1949, when he revealed a case discovery rate of 25.2 per 10,000 x-rays among eight eastern counties, as compared with a rate of 19.0 among nine western counties⁽⁵⁾.

With further reference to the favorable tuberculosis case rate for the Piedmont section of the state as compared with the eastern and western sections, it should be observed that all 13 counties in the state that own and operate their own x-ray mobile units are located in the Piedmont section. Furthermore, of the 15 hospitals in North Carolina which have initiated routine chest x-ray programs for hospital admissions, 8 are located in the Piedmont⁽⁶⁾. Tuberculosis case-finding facilities provided by private clinics, major medical centers, health departments, and voluntary agencies are more generally available in this section of the state than in the eastern and western sections. Would these factors justify the concentration of case-finding activities by the state's mobile x-ray units in the high incidence areas of the state where local case-finding facilities are not as readily available?

I emphasize that I am not advocating withholding the mobile units from any given

Table 1
Three-year Average Tuberculosis Morbidity Rates
Per 100,000 Population by Color and Sex:
North Carolina, 1954-1956

Sex and Color	Rate
All classes	
Total	44.9
Male	55.6
Female	34.3
White	
Total	32.9
Male	42.8
Female	23.0
Non-white	
Total	79.2
Male	93.0
Female	65.9

section, but rather am suggesting a more equitable and epidemiologic use of the state's facilities. In other words, would the principle of "Divide and conquer" for tuberculosis control be indicated?

Sex and race

Pertinent data for sex and race tuberculosis case rates for 1954-1956 for North Carolina (table 1) indicate that males, with a rate of 55.6, as compared with a rate of 34.3 for the female segment of the population, offer a special challenge to the tuberculosis control program. The case rate ranges from a low of 23 per 100,000 for white females to a high of 93 for non-white males, or four times as great as the white female rate⁽⁴⁾.

Age

A study of the distribution by age groups of the 1,850 new cases of tuberculosis reported in North Carolina for 1956 (fig. 2), provides further pertinent information for

PERCENTAGE DISTRIBUTION OF NEW TUBERCULOSIS CASES BY AGE GROUPS, NORTH CAROLINA, 1956

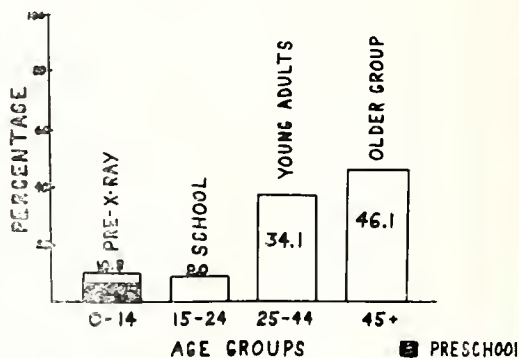


Figure 2

a softening-up approach to this disease, in preparation for a "Divide and Conquer" type of control.

In making this study, the following percentile distribution of tuberculosis cases is noted: 0-14 years (pre-survey x-ray age)—10.8 per cent; 15-24 (school x-ray age)—9 per cent; 25-44 years (young adult group)—34.1 per cent; 45 years and older—46.1 per cent. It is interesting to note further that of the 198 cases reported for 1956 in the 0-14 year age groups, 67.6 per cent of the cases occurred among preschool children—5 years of age or younger—with the next peak incidence occurring during adolescence. These latter data suggest the urgency of intense follow-up with tuberculin testing and x-ray of contacts of known cases among these very young children and young adolescents, particularly since these groups are not usually included in the conventional mass chest x-ray survey.

These data proclaim further that, although the largest percentage of new cases of tuberculosis is discovered among the older age groups, the young adult population in North Carolina still provides a highly significant percentage of the new cases of this disease. Here, again, is revealed the urgency for persistent follow-up, in routine tuberculosis control programs, of all young adults exposed to new cases of tuberculosis. The first two active cases of tuberculosis confirmed in the 1957 Chest X-ray Survey in Halifax County were in white females in the young adult age group who had been exposed to known cases of tuberculosis, but who had failed to cooperate in reporting for their periodic follow-up chest x-rays. Two weeks after the survey still another active case of tuberculosis was confirmed in a young white woman who had been exposed to a known case of tuberculosis. This young woman refused to be examined two weeks prior to the survey or to have an x-ray during the survey, but was finally immobilized by a pleural effusion.

It must be stressed again and again, however, that the older age groups demand special attention in all chest x-ray case-finding programs, since the very nature of tuberculosis among these patients is favorable for the development of "carrier cases." These are the age segments against which a "Divide and Conquer" approach,

and a blitzkrieg attack must be directed in order to make a significant reduction in the reservoir of active cases.

Economic factors

The economic factor of tuberculosis case-finding activities must be more critically examined in the future and included in the over-all strategy of tuberculosis control. For 1956, the cost of the Tuberculosis Section, State Health Department, of the x-ray examination per person was 58 cents. This included all expenses in connection with rendering the person a final diagnosis. Moreover, the additional cost to the counties has ranged from 2.5 cents to a high of 12 cents per person x-rayed⁽⁷⁾. The cost of discovering each suspected case of tuberculosis was \$128.00.

Lichtenstein⁽⁸⁾ reported recently that, in Mass X-ray Surveys in Chicago during 1954, the cost per single screening film was about 65 cents. The cost per tuberculosis suspect film was about \$53, while the cost for each new confirmed active case of tuberculosis was \$490. Since Chicago is a city with large slum areas, a large proportion of non-white persons, tremendous immigration of labor, and areas with very high mortality rates, this cost of \$490 per confirmed active case of tuberculosis compares very favorably with other sections of the country, where the cost per active case ranges from \$700 to \$5,000 per case. This wide variation in cost for chest x-ray surveys emphasizes further the absolute necessity for concentrating x-ray case-finding activities in high incidence areas.

It should be recalled, however, that the Chest X-ray Surveys have many values other than finding active cases of tuberculosis. These include: (1) finding old active cases of tuberculosis that have been lost to observation; (2) locating old and new inactive cases for follow-up; (3) locating contacts of all the above groups; (4) finding other significant abnormalities in the chest; (5) stimulating public interest in the tuberculosis problem; and (6) alerting the intelligent segment of the public to the tuberculosis problem through the use of large numbers of volunteers⁽⁸⁾.

Concentrated Program in Halifax County

Switching from a discussion of general strategy of tuberculosis control in the state,

Table 2
Five-year Average Tuberculosis Morbidity Rates
Per 100,000 Population by Color:
Halifax County, 1952-1956

	Rate
Total	78.1
White	60.0
Non-white	93.8

we now focus attention on a specific sector of the battlefield—namely, Halifax County. Although the tuberculosis mortality rate has declined markedly in this county in recent years, the morbidity rate has stubbornly refused to give ground. During 1956 this county experienced 40 per cent increase in new proved active cases of tuberculosis as compared with 1955, using only routine but intensive case-finding procedures.

Analysis of data

Using the "Divide and Conquer" approach to Halifax County's Fifth Chest X-ray Survey held in February and March 1957, a critical study of local tuberculosis data was made for the period, 1952-1956.

During this period (table 2) 234 new cases of active tuberculosis were reported in Halifax County. Sixty-seven per cent of these patients were Negro (Negro population, 57 per cent); 61 per cent were males and 43 per cent were more than 45 years of age. The tuberculosis rates per 100,000 population during this period were as follows: total—78.1; white—60.0; non-white—93.8.

In a review of the geographic distribution (fig. 3) of the new cases reported for this five-year period in Halifax County and carefully located on a spot map, it was found that two distinct areas (areas 1 and 2, fig. 5), with only 45 per cent of the county population, produced 56 per cent of the new cases and 60 per cent of the deaths. Although case rates based on small numbers of cases are not too reliable, by comparisons within the county the incidence rates for these two areas were extremely high.

A racial breakdown of new cases in these areas revealed that in one section (area 1) there was an unusually large number of cases among the white segment of the population as compared with the non-white, while in the other high incidence area (area 2) virtually the entire tuberculosis problem was among Negroes.

The difference between these two areas

TUBERCULOSIS CASES HALIFAX COUNTY - 1952 - 1956



Figure 3

was so great that they would appear to be from different section of the state. This difference became all the more striking when it was considered that both areas are essentially rural, that the socio-economic status is essentially the same in both areas, and that the white population of the two sections is almost identical.

The urban area of the county (area 3), where the greatest percentage of the white population is concentrated, ranked third in the number of new cases reported for the period.

Individualized approach

After completing these statistical studies, a chest x-ray survey committee made up of a broad representation of citizens, both white and non-white, was organized in each community. Health Department personnel presented to the committee in each section specific data regarding the distribution of cases by race, sex, age, and geographic location and solicited suggestions from the committees regarding the best approach to the x-ray survey in each area. The members of each committee seemed to be impressed with the specific data for their community and with the spot map which showed the exact location of the cases in their area.

During the committee meetings, while various responsibilities and assignments were discussed and accepted by these members, special emphasis was placed on making as personal an approach as possible in the communities within each area which had produced an unusual concentration of new cases during the five-year study period. The committee members were also urged

to concentrate their efforts on citizens in their communities more than 45 years of age.

The newspapers and radio station in the county gave wide publicity to these committee meetings and maintained a steady flow of news releases regarding the specific tuberculosis problem and the scheduled x-ray survey, with emphasis on the two high incidence areas.

In the meantime, more than 96,000 pieces of educational material, most of which were specific for the high morbidity areas, were prepared by the Halifax County Health Department personnel with the assistance of a publicity secretary from the State Survey Unit. The importance of lung cancer also was emphasized throughout the entire educational phase of this project.

In addition to the meetings of the principal x-ray survey planning-committees, many additional meetings of subcommittees were held in cooperation with members of the Halifax County Health Department.

The entire program was cleared in advance with the medical profession in the county.

Mobile x-ray units

The x-ray buses were scheduled according to the ranking of the tuberculosis problem among the various communities as revealed by the five-year study period, with the two areas of highest incidence, particularly the top area, receiving the greatest consideration. Only two mobile x-ray buses were used in this project.

An interesting sidelight of this survey was the difficulty encountered in one community where an x-ray bus was not scheduled. This area had been excluded, since only 5 proved cases of active tuberculosis had been reported over the five-year study period, and since an x-ray bus from an adjoining county just recently had visited this community. The citizens in this area insisted so strongly on x-ray service, however, that the State Health Department consented to send an extra bus for a three-day period. It is interesting to report that, as we had suspected from our previous statistical studies, not a single active or suspected active case of tuberculosis was revealed by the x-ray survey in that area, although 813 citizens were x-rayed during the three-day period.

The survey schedule had hardly begun when it became apparent that public response to the educational campaign was overwhelming. When the survey was completed, the total number of citizens x-rayed exceeded the previous survey held in 1954 by approximately 4,000. The response in the high incidence areas was particularly gratifying.

As this paper is being prepared, not all the citizens called back for re-examination have been processed; however, 10 of the 15 active cases to date were discovered in the high incidence areas, and 9 were found in the single area with the top incidence for the five-year study period. Thus it can be seen that, although the two high incidence areas accounted for only 46 per cent of the total survey films, these areas, to date, have produced 66 2/3 per cent of the active cases of tuberculosis, while the top incidence area, representing only 30 per cent of the total survey films, has produced 60 per cent of the active cases. Eight of these cases were among white and 7 among non-white patients.

Mopping-up operation

Knowing that there is always a significant number of persons who fail to respond to a chest x-ray survey, the personnel in the Halifax County Health Department planned a special mopping-up operation in high incidence areas following the 1957 survey. This procedure is being tested first by a selected number of public health nurses who visit certain communities in the high incidence areas to obtain pertinent information about persons who did not have an x-ray during the survey.

These persons are being given written notices to report to the Halifax County Health Department on a specific date and at a specific hour for a chest x-ray. These notices emphasize the urgency of the tuberculosis problem in these areas and are designed to have the appearance of a legal summons. The Health Department personnel felt justified in following this procedure, since all phases of the recent chest x-ray survey created a deep concern among the more intelligent citizens in these areas regarding their specific tuberculosis problem.

Summary

All members of the Tuberculosis Control

Team are urgently engaged in conducting an intensive follow-up of all contacts of known cases, particularly in the preschool, young adolescent, and young adult groups.

The infrequent references to tuberculin testing in this paper mean only that this procedure is so very important in the present day tuberculosis control program that it deserves a full and separate discussion rather than a mere reference. Certainly persistent tuberculin testing, at least among the preschool and adolescent groups, is critical and will become increasingly urgent among all groups as the morbidity rate for tuberculosis in North Carolina declines.

The use of x-ray facilities, particularly mobile x-ray units, in the present day tuberculosis case-finding program should be based on a "Divide and Conquer" strategy, with the principal efforts being directed toward high incidence groups as revealed by a critical study of race, sex, age, and geographic distribution of reported cases.

The tuberculosis mortality rate is so low

that it is no longer a helpful epidemiologic tool, except among infants and pre-school children.

The infection rate as revealed by a stepped-up program of tuberculin testing will become an increasingly significant epidemiologic factor in tuberculosis control.

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Urologic Considerations in the Practice Of Gynecology

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The genital and urologic systems are closely related in many respects. They are intimately associated in origin, both arising from the mesoderm as a common urogenital ridge. Further growth brings about the development of the nephric and genital systems in close approximation⁽¹⁾. In many respects they remain closely related. The presence of congenital abnormalities in one of the two systems frequently indicates that abnormalities will be found in the other system. Congenital urologic abnormalities have been misinterpreted as gynecologic disease. The pelvic kidney is a good example of this misinterpretation. When development is complete, the reproductive and urologic systems are so intimately associated that some areas of one are anatomically superimposed on the other.

Urologic Changes During Pregnancy

During normal pregnancy so-called physiologic changes take place in the urinary tract. Kidney drainage is impaired. Dilatation and elongation of the ureters and enlargement of the renal pelvis are usual findings during gestation. Eighty per cent of all pregnant women have so-called "hydroureter of pregnancy."⁽²⁾ The poor drainage associated with this condition contributes to the difficulty in managing urinary tract infections during pregnancy. Although changes in the urinary tract due to pregnancy usually disappear within six weeks *post partum*, if infection occurs or pregnancies are repeated rapidly, permanent dilatation of the upper urinary tracts may develop, with resulting chronic urinary tract problems.

Another physiologic change is the senile urethral stricture. With careful questioning

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Fig. 1. Roentgenogram of a 39 year old white woman showing skin clips from recent laparotomy and pyelograms revealing bilateral ectopic pelvic kidneys. The ectopic pelvic kidneys were mistaken preoperatively for gynecologic disease.

these patients will admit considerable hesitancy on urination. They will also give a history of requiring considerable time to empty the urinary bladder. The usual chief complaint from these patients, however, is lower abdominal discomfort, which they will frequently interpret as being pelvic in origin. Catheterization will reveal abnormal urinary residual and frequently chronic urinary tract infections. Repeated urethral dilatations are indicated, and will usually keep these patients asymptomatic.

Urologic Studies in Diagnosis and Prognosis

From a diagnostic and prognostic standpoint, urologic histories and studies can be of immense value to us in gynecology. For example, we are sometimes uncertain on our initial examination of a patient with



Fig. 2. Roentgenogram of a 44 year old Negro woman with carcinoma of cervix, International Classification IV, showing total ureteral obstruction, left.

carcinoma of the cervix as to whether broad ligament thickening is due to carcinoma or inflammation. Urologic investigation can be an aid here, for with carcinoma of the cervix, International Classification III or IV, ureteral obstruction will frequently be evident, while with carcinoma of the cervix, International Classification I or II, associated with parametrial inflammatory reaction, evidence of ureteral obstruction will not be present⁽³⁾.

We all appreciate the fact that the most common cause of death due to carcinoma of the cervix is renal insufficiency resulting from ureteral obstruction. Less frequently appreciated is the fact that benign pelvic disease may cause urinary tract damage. In 1940 Everett and Sturgis⁽⁴⁾ found that 50 per cent of 100 patients with benign pelvic diseases showed dilatation of the upper urinary tract. Pathologically, disease has no



Fig. 3. Roentgenogram of a 30 year old Negro woman. The left ureter was transected during surgery for a large interligamentary fibroid tumor on the left. Implantation into the bladder was performed at the time. This roentgenogram, made nine months after surgery, showed good function.



Fig. 4. X-ray study made January, 1957, revealing total obstruction of the left ureter and the presence of stones in large pyonephrotic kidney. This patient, a 34 year old Negro woman, was treated for squamous cell carcinoma of the cervix on January, 1951, by radium and deep x-ray treatment. No evidence of carcinoma is now present.

respect for the narrow anatomic delineation separating the urologic and genital systems. A gynecologic condition causing urinary tract disease should be corrected even in absence of a purely gynecologic indication for correction. One must keep in mind, however, that the changes in the urinary tract may be silent and for this reason urologic investigation and study are necessary for detection.

Gynecologists should include the urethra in every vaginal examination. Urethral disease can cause symptoms interpreted by the patient as pelvic in origin. Careful urethral examination, particularly if the urethra is stroked⁽⁵⁾, will occasionally reveal a diverticulum when the patient's presenting complaint may have appeared to be gynecologic in nature.

Urinary Incontinence

Urinary incontinence and lack of vaginal wall support are frequent problems in gynecology. To get a history of incontinence, however, one must frequently ask a very direct question, as many women, though understandably distressed by it, are reluctant to admit having this condition unless it is so marked as to constitute a social problem. Since Dr. Howard Kelly's original success in the treatment of stress incontinence by simple plication of the vesical neck area, greater success has been obtained using mattress sutures to plicate the full length of the urethra. There have been other advances, such as the Goebell-Stoeckel procedure and its many modifications, all for the stress type of urinary incontinence. As gynecologists we must distinguish, however,



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between the stress and the urge types of incontinence if we are to expect any degree of consistent success.

The urge type of urinary incontinence is due to urologic or neurologic causes; the stress type to gynecologic or obstetric factors⁽⁶⁾. The obstetric cause, for example, may simply be increased intravesical pressure sufficient to overcome the normal vesical sphincter tone. In such cases delivery will solve this problem very satisfactorily. On the other hand, stress incontinence may be due to vesical sphincter weakness such as we see associated with cystourethroceles. These are usually the result of childbirth and/or inherent weakness of the fascia. Operative correction of this condition, or the use of the Kegel perineometer in some cases, can be very satisfactory. None of the gynecologic procedures will correct the urge type of urinary incontinence satisfactorily. For this reason it is imperative that the type of incontinence be determined in each individual case before operative correction is undertaken.

Surgical Hazards

The dangers of operative injury to the ureters is always present. Prevention is naturally of utmost importance, and pre-operative ureteral catheterization in difficult laparotomies is of immense value. I have often heard the statement that catheterization is unnecessary, but it is a valuable safeguard, requiring little time. The risk is small compared to the possibilities of ureteral injury during difficult pelvic surgery.

Nevertheless, if one practices gynecology long enough, he probably will be faced with an injured ureter. If this occurs high, ureteroureteral anastomosis can usually be done. If it occurs in the lower portion of the ureter, implantation into the bladder is easier and is more likely to be successful than ureteral anastomosis⁽⁷⁾.

Such repairs should be performed over catheters, made extraperitoneal, and the extraperitoneal area drained. Postoperatively, when a ureter is found to be ligated or damaged, performing a nephrostomy or pyelostomy may save renal function. It is a frightening thought to consider re-entering the pelvis in an attempt to find and repair a damaged ureter in the face of postopera-

tive edema of tissues and perhaps some infection. Generally, a period of six weeks should elapse before reconstruction of a ureter is attempted. Repair of vesicovaginal fistulas should not be attempted for six months after they occur or after an unsuccessful attempt at closure. Although this lapse of time is difficult for the incontinent patient and the responsible physician, it is necessary in order that the traumatized tissues can become suitable for successful repair.

Hazards of Radiation

The hazards of radium irradiation to normal tissues are well known and limit greatly the dosage that can be used in the treatment of carcinoma. Because of the intimacy of the genital and urologic systems, the potential danger of irradiation to the urinary tract is very real, not only during the immediate postirradiation period, but also for years to come. Irradiation effects due to obliterative endarteritis may be progressive for as long as 10 years after completion of radium therapy⁽⁸⁾. The significance of this is easily appreciated when one sees a few serious urinary tract complications in patients apparently cured of carcinoma of the cervix.

Here again, consideration of urologic factors is necessary for good patient care, as we must not overlook the performance of urinary tract studies at repeated intervals following completion of radiation therapy for carcinoma of the cervix. Early detection of radiation damage to the urinary tract can be lifesaving in terms of preserving renal function.

Conclusion

Postpartum and postoperative care of the bladder and many other aspects of the urologic system are of tremendous importance to any obstetrician and gynecologist. I am not suggesting that all gynecologists practice urology, but certainly we should be well aware of the significance of urologic problems as they pertain to and arise in gynecology and obstetrics.

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Cat Scratch Disease

Report of Case Produced by Inoculation with Puppy Bite

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and

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Since 1950 several hundred cases of cat scratch disease have been reported in this country. This condition is recognized as a regional lymphadenopathy produced by the bite or scratch of a cat. The disease is characterized by an indolent primary lesion at the site of inoculation, with fever and systemic reaction and the development of regional lymphadenopathy without lymphangitis.

In 1954 Daniels and MacMurray⁽¹⁾ reported 160 cases of cat scratch disease. Fifteen modes of inoculation were noted in these cases: 148 patients had some contact with cats; 12 had no known contact with cats. As far as we know, there is no report of this entity's having been produced by dog bite. This interesting feature justifies the report of the following case.

Report of a Case

A 17 year old Negro male student was admitted to a local hospital on July 30, 1957. Two months before admission he had been bitten by a puppy on the fifth finger of the right hand. Following the bite a slow-healing indolent sore developed on the lateral aspect of the injured finger. He stated that this sore took about six weeks to heal. About two weeks after the scratch or bite with the puppy's teeth, some grandular swelling developed in the right axillary region, and has persisted to some degree since the onset. Three days before admission the patient had an exacerbation of fever, headache and backache, and on the following day experienced a shaking chill. About 48 hours prior to admission he became nauseated and vomited once. He has lost 6 pounds since the onset of the present illness.

The patient had measles, mumps, whooping cough and chickenpox at an early age. His tonsils and adenoids were removed at 5 years of age. No other serious illnesses were noted.

Physical examination

Physical examination revealed a well developed, well nourished young Negro male, who appeared to be only slightly ill. On admission the temperature was 98.6 F., the pulse 90, the respiration 20, and the blood pressure 100 systolic, 60 diastolic.

A large, firm, nontender gland, measuring about 1.5 to 3.5 cm. in diameter and freely movable, was detected in the right axilla. Several small nodes were noted in the cervical and inguinal regions. There was a small scar on the lateral and proximal aspect of the right fifth finger. Physical examination was otherwise negative.

Accessory clinical findings

A chest film made July 31 showed the heart to be normal in shape and size. The bronchovascular markings were accentuated in both lung fields. There was no evidence of consolidation or atelectasis. The diaphragms were low in position. The visualized ribs appeared normal. The above findings were considered compatible with chronic bronchitis or asthmatic bronchitis.

A urinalysis done July 31 was reported as follows: color, straw; reaction, alkaline; specific gravity, 1.017; albumin and sugar, negative; microscopic examination, negative.

Blood studies done on July 31 disclosed 4,500,000 red cells, 13 Gm. of hemoglobin, 6,000 white cells, with 47 per cent neutrophils, 1 per cent eosinophils, 25 per cent

small lymphocytes, and 27 per cent large lymphocytes.

Another blood count done August 1 showed 6,400 white cells, with 61 per cent neutrophils, 4 per cent eosinophils, 30 per cent small lymphocytes, and 5 per cent large lymphocytes. The erythrocyte sedimentation rate was 27 mm. in one hour. The total serum protein was 6.8 Gm. (albumin 4.1 Gm., globulin 2.7 Gm.).

Skin tests done on August 5 and read 48 hours later showed an area of induration of about 1 cm. in diameter to 0.01 cc. of cat scratch antigen given intradermally.

The hospital course was rather uneventful. The patient's temperature, pulse, and respiration remained normal. He had been receiving 600,000 units of penicillin intramuscularly daily for three days prior to admission. This schedule was maintained throughout his hospital stay. On August 3 a node was removed from the right axillary region. On gross examination the specimen was found to consist of two pieces of tissue which apparently represented a lymph node measuring about 2 by 1 cm., which had been sectioned. It was fairly soft, and section revealed areas of brownish-yellow discoloration. Microscopic examination revealed a markedly hyperplastic structure with multiple focal areas of acute suppuration and necrosis. Occasional small giant cells were noted. The capsule appeared somewhat thickened and showed leukocytic infiltration. Some of the smaller blood vessels present showed degenerative changes of the lining in the epithelium. Many of these cells were quite edematous. The histologic picture was that of a suppurative lymphadenitis, and was consistent with the changes found in cat scratch fever.

Diagnosis: Granulomatous suppurative lymphadenitis suggestive of cat scratch fever.

Summary

A typical attack of cat scratch fever following a bite by a puppy in a young Negro man is presented. The only interesting and unusual feature of this case is the fact that the infection was apparently produced by the bite of an animal other than a cat.

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The Medical Spectator

RETREAT FROM AGING

"No man is an island, intire of it selfe; every man is a peace of the continent, a part of the maine Any man's death diminishes me, because I am involved in Mankinde, and, therefore, never send to know for whom the bell tolls; it tolls for thee."

John Donne

* * *

"Play it cool."

Old Esquimaux Adage

* * *

What with mass media, super highways, general semantics, cybernetics, hi-fidelity and subliminal advertising, the market place of today is noisier than any Eastern bazaar. How Thoreau, mumbling about the Fitchberg railroad, could say that most "men lead lives of quiet desperation" is beyond most of us. Perhaps he did most of his talking to himself or even better took time to hear himself out. Or perhaps communication is finding someone who "will listen to me when I'm talking."

One group in this country now seems to be excluded from the chase—the tired and halt, young and old. There was a time when these people were active rather than emeritus members of our civilization and of course we have become much concerned with the increasing numbers of older people whom we fear we will have to support directly or with less personal discomfort through the Federal Treasury. Last year, in fact, the Commission on Chronic Illness published volume two (before volume one—so do commissions and committees function) of its study of chronic illness in these United States, *Care of the Long-Term Patient*⁽¹⁾. As literature, the report may be compared favorably with the Articles of War, and this is most unfortunate because the inert facts are there to be shaped by any reader, has he perseverance.

What the elderly and the chronically ill need is a pamphleteer and then an explosive evangelist as advocates before the rice pudding prose and footnote forests of overly organized philanthropic organizations bore the public to tears.

It is much easier to raise money when those benefiting are children; if the chil-

dren to be helped have visible deformities, it is even simpler. And understandably so. Here is a child, helpless, with normal emotional growth and learning apparently denied. Who can withstand the pleas of children left out of the main stream of human activity? Yet if the flaws are hidden from view or the victims have reached middle age, money raising isn't as easy. For we worship youth and speed: the sleek and the shiny.

In such a society the elderly are marked for isolation because they limit the independence of the younger people or perhaps remind the young that all of us must age. Maybe this is because our grandparents, growing up in rural, village cultures, were "tradition" or "inner directed" according to David Riesman. Or it may be that the promise of science has failed; public health advances have wiped out malaria in Corsica, have improved infant mortality in India to the point that there are too many people for available food; prosperity has cut the incidence of vitamin deficiency states to the point that few physicians under 35 have ever seen a case of pellagra. Maybe we got the notion that nature was ours and we had but to wish to make it so. The handicapped and the elderly remind us that we are kidding ourselves.

With full employment, we get abundance in production and scarcity in service so that one of the problems is who performs the chores required by the chronically ill. An army medical laboratory officer once described the ideal enlisted man as one who could do urinalysis all day long and enjoy it. One of the unasked questions in the Commission's Study is "Who will carry the bed pans?"

The answers, then, may not after all be among the 80 recommendations, most of them very sensible, of the Commission on Chronic Illness. They may lie in readmitting some members to the human race.

Evidence is accumulating that much chronic illness can be attributed to emotional isolation as well as to tissue changes. All physicians are aware that senile behavior and the microscopic appearance of brain tissue do not always correlate well. This leads back to the attitude of the society toward the individual and his reactions in turn. J. Z. Young has suggested that ac-

tivity stimulates further activity and in so doing increases cerebral function, while Aring⁽¹²⁾ in a recent paper has offered variations on the same theme. The sweet, alert, active lady of 90 was asked by two young ladies of 12 how and why she was all these. "Because I started before I was 12," she replied.

The recent "police action" in Korea provides further suggestions about the dangers of isolation from the mainstream of human thought and activity. For the first time in our history, no American captured escaped from prison camp. For the first time, a number of American prisoners of war could be accused of collaborating with the enemy—and this in a period of unparalleled material prosperity in this country. Studies of these prisoners on release showed that the well integrated, active, purposeful individual best withstood indoctrination, while the rejected and indifferently oriented, the uncommitted who "played it cool," most readily accepted the "progressive" outlook.

Eugene Kinkead quotes an Army psychiatrist⁽¹³⁾: "The basic psychological aim of Communism, the aim that is at once its greatest strength and its greatest weakness, is the utter isolation of the individual from his fellows." This makes the individual, then, the slave of the system and leaves him to guess as best he may the crooks and turns that the system thinks right for him. If he is not a clever follower of the party line, he will most certainly live in a world of anxiety with a sense of rejection and perhaps of guilt at being unable to follow the system.

With our present stress on length of life rather than on the way of living, in our current state of infatuation with the physical to the detriment of the intellectual, with adjustment (to what?) a prime concern, Riesman's "other directed man" emerges. Because he is isolated, he must isolate his fellows. He is really the long-term patient.

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DECEMBER, 1957

Guest Editorial

MORE LIGHT ON THE BIENNIAL REGISTRATION ACT

Since several doctors have written letters protesting against the Biennial Registration Act, the following editorial was written at the request of the editor in order to clarify the matter.

* * *

For a number of years the North Carolina Board of Medical Examiners has felt that a registration of the doctors licensed by this Board should be put in effect. Thirty-five states of the Union require a registration of their licentiates.

In 1956 the Board of Medical Examiners presented information to the Executive Council of the North Carolina State Medical

Society and got its approval of a registration. The whole question, with reasons why registration should be valuable, was presented to the House of Delegates of the North Carolina State Medical Society at its meeting in Pinehurst in May, 1956. This House of Delegates instructed its Legislative Committee to have a bill introduced in the 1957 Legislature requiring registration. Such a bill was introduced and enacted, with the law to go into force on January 1, 1958.

This registration was not enacted for a revenue producing measure. The law reads that the fee shall not exceed \$5.00 for two years. The Board put the fee at the maximum at the beginning in order to set up machinery, as it was necessary to have an additional secretary and office space to administer the act.

If the Board of Medical Examiners had not had definite plans for such an enactment, the Commission for Reorganization of the State Government would have forced us to come under such a regulation. A bill was enacted in the 1957 Legislature requiring the secretary of all boards to report to the Secretary of State the name and address of each licentiate of the respective board. This could not have been done without registration.

The individual doctor's first thought that such a list could have been obtained from the privilege tax, which is incorrectly classified as a license. This could not have been done. The fee paid for the privilege tax is a revenue measure only, and anyone sending in \$25.00 can get the privilege license to practice medicine.

It is difficult for anyone who has not served on the Board of Medical Examiners to understand all of the advantages of being able to keep up with the licentiates and the need for such a procedure.

Whereas this is an added expense for the practitioner, it is felt that it should not be a burden on anyone.

It has been stated that no other professional group has to pay for registration. It may interest physicians to know that the following pay registration on an annual basis to their respective boards:

Group	Annual Registration Fee
Lawyers	\$10.00
Pharmacists	10.00
Dentists	5.00
Nurses	2.00
Opticians	15.00
Physical therapists	5.00
Certified public accountants	5.00
Chiropractors	10.00
Optometrists	15.00
Medical technologists	2.00

(through National Registry)

JOSEPH J. COMBS, Secretary
North Carolina Board of
Medical Examiners

* * *

LESSONS FROM THE SPUTNIKS

The news that Russia had launched Sputnik I, and soon afterward Sputnik II (with Laika on board), provoked a reaction in this country that must be comparable to that of Japan when the first atomic bomb was dropped on Hiroshima. Parenthetically, many Americans regret that this country was the first to use atomic energy for mass killing—and thus established the precedent so dear to the legal mind.

Perhaps the first reaction of the average citizen was of doubt. Most of our people believed that we were so far advanced in science that such an event could only happen here. The next was to demand frantically that our national leaders do something to regain our lost prestige—and that they do it in a hurry, regardless of expense.

Now that John Q. Citizen has been jolted out of his complacency, he should profit by some of the lessons taught by the Sputniks. One of the first lessons is in humility. He now knows that this country does not have the superiority in scientific know-how that he had been led to believe. He might also reflect that some of the most effective workers in our country's scientific progress have come from foreign countries, including our former enemy, Germany.

He should also reflect rather soberly on the loss of brain power to this country's welfare resulting from the hysterical concern over our "security," which reached its depths during the heyday of the late Senator McCarthy.

Another lesson which our leaders should take to heart is the disgraceful spectacle of our Army, Navy, and Air Force fighting among themselves, at the taxpayer's ex-

pense, to get credit for developing long range missiles, instead of uniting their forces for the country's good.

We might also learn from the Russians the importance of inculcating patriotism—love of our country—in our children. While extreme nationalism is to be deplored, our youth have not been taught enough about the history of our country, and do not sufficiently appreciate the golden opportunities it affords. A wise teacher said recently that "America" should be sung at every Thanksgiving service.

There seems to be general agreement that our educational system badly needs improvement. The U.S. Office of Education has issued a report comparing the Russian system with ours, and showing that Russian children learn far more science and foreign languages in 10 years than ours do in 12. The Russians have shown what can be accomplished by diligent application to books, and by rewarding the best students in much the same way that our schools have honored their athletes. One almost certain result of the Sputniks will be to increase respect for education in this country. For many years entirely too many so-called students have thought it beneath their dignity to pore over textbooks. The easy courses have been far more popular than the hard ones, such as mathematics, Latin, and the sciences. For example, in a recent book of essays President Griswold of Yale cites the transcript of a high school senior seeking admission to Yale. Of his junior and senior high school courses "two were in English, one in American history, and the others in typing, speech, chorus, physical education, journalism, personality problems, and Marriage and Family."

The term "egg-head" has been applied in derision to the few who applied themselves to their studies, and elected those mastered only by effort. The Sputnik has changed that attitude almost overnight. It is possible that we may see the top men in their high school academic standing sought by our colleges and universities as eagerly as have been all-state football stars. The flood of criticism of our educational system, especially the secondary schools, is evidence that a drastic overhauling is needed.

A final thought is that if man can not

find some way to outwit his own instruments of destruction — if he has really created a Frankenstein monster which will destroy him—does he deserve to live? Since the United States was the first nation to use atomic energy in war, we cannot escape our share of responsibility for the awful possible consequences. The thought of the mass killing made possible by instruments already invented, not to mention others envisioned, is too horrible to dwell upon. The alternative is to turn our thoughts and prayers to the One who said, "Not by might, nor by power, but by my spirit." Although written many years ago, Kipling's lines are peculiarly appropriate for these days:

If, drunk with power, we loose
Wild tongues that have not thee in awe,
Such boastings as the Gentiles use,
Or lesser breeds without the Law—
Lord God of Hosts, be with us yet,
Lest we forget—lest we forget!

For heathen heart that puts her trust
In reeking tube and iron shard,
All valiant dust that builds on dust,
And guarding, calls not Thee to guard,
For frantic boast and foolish word—
Thy Mercy on Thy People, Lord!

* * *

CHEMICAL TESTS FOR INTOXICATION

One of the most interesting contributions to the September issue of the *Journal of the Michigan State Medical Society*, by C. W. Muehlberger, discussed the use of chemical tests for alcoholic intoxication in Michigan law enforcement. The usually accepted concentration sufficient to cause intoxication is 0.15 per cent or more. Dr. Muehlberger stated that 2,000 volumes of alveolar breath will contain the same amount of alcohol as one volume of blood, and that the test was simpler to perform than the blood concentration determination.

The United States Supreme Court has ruled that taking a specimen of blood from an individual arrested for drunken driving does not violate his rights as an individual⁽¹⁾. Apparently Mr. Lester P. Dodd, legal counsel for the Michigan State Medical Society, had not read the Supreme Court decision when, in a letter to Secretary Bill Burns, he

gave as his opinion that "a doctor has no right to draw a blood sample without the consent of the patient."⁽²⁾ Dr. Muenlberger admits that there are technical if not legal difficulties in obtaining blood specimens for examination, but says that the measurement of the alcohol content of the breath or urine "are only slightly less reliable as an index of alcohol intoxication and . . . are amply accurate." For many reasons the breath test is more satisfactory and more reliable than the urine test.

The use of chemical tests for alcoholic intoxication is of special interest in North Carolina. As has been stated before in this *JOURNAL*⁽³⁾, in 1938 a presidential recommendation that our society sponsor such a test was unanimously approved by the House of Delegates — but our state legislature would not hear to its adoption. Since then a number of states have required such a test and in all states it is accepted as reliable evidence. It has been used in Winston-Salem since July, 1951. That it may be beneficial to one arrested for drunken driving was evidenced by the fact that of the first 11 men arrested in Winston-Salem for drunken driving, two were sent to the hospital instead of to jail. It is possible that their lives were saved as a result.

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* * *

PRESIDENT EISENHOWER'S ILLNESS

Every true citizen, whatever his political affiliation, must have been saddened by the news of the third major illness President Eisenhower has had since he became president. It seems particularly unfortunate that the NATO conference came so soon after his cerebral thrombosis. While many question the wisdom of his attending this conference, few, if any, will question that he went because he felt it was his duty to go. And surely every true American will hope and pray that he may not be the worse for the NATO ordeal, and that he may have no other serious illness.

President's Message

PREPAID MEDICAL INSURANCE

The subject I have chosen to discuss this month has been aired in these columns by my predecessors on several occasions. It had been my policy to refrain from further comment until the report of our Advisory Committee working with Blue Shield had been brought to light at our next Annual Session; however, certain observations of general interest have occurred recently which, to my mind, should have some appeal to the members of the medical profession of our state.

In September it was my privilege to be invited to attend the meeting of the Michigan State Medical Society with representatives from other states, in order to hear the reports of a recently completed public opinion survey on prepaid medical insurance.

This survey, the largest of its kind ever attempted, was conducted jointly by the Michigan State Medical Society and the Michigan Health Council, the latter being a nonprofit educational institution having as its membership many associations whose prime interest is health. The purpose of the survey was to get a direct expression from the public and the medical profession as to their desires regarding medical insurance coverage. It was aimed to reach people in all walks of life and was conducted with the assistance of sociological and research experts as consultants. A total of 55,169 persons were reached by a questionnaire. In addition, 1,000 people were questioned by personal interview. Since newspapers in Detroit and Lansing also carried the questionnaire, it was estimated that as many as 640,000 people were reached by one of several means. Some 5,000 doctors were questioned, with a response of 38 per cent.

Three main questions were asked:

1. What medical services do people want covered by medical prepayment plans and what do they feel should be the order of priority for these services?

2. How much will people be willing to budget for these services and which of the services are they most willing to pay for?

3. What do doctors want from any medical insurance plan?

The report of the survey contained more than 240 pages. Some of the high lights are

as follows. The study revealed that of those responding, 81 per cent are covered by some form of prepaid insurance and that 65 per cent of these are Blue Shield. The desired benefits were in hospital cases—(1) surgical, (2) diagnostic x-ray, and (3) medical visits, in this order. In the physician's office the desired coverage was (1) emergency first aid, and (2) minor surgery.

It was demonstrated that people do not have a very good idea of what coverage they have in their policies and that better instruction should be given to acquaint them with the details of their protection. Furthermore, it was shown that policy-holders in general do not know how much they are paying for insurance and that they would be willing to pay more to get the protection they desire. For instance, the survey revealed that people on the average believed they were paying \$5.96 per month, that they really paid only \$2.83 per month, but that they would be willing to spend as much as \$6.95 if they could get the desired coverage. A deductible plan was favored by many; 51 per cent of the \$5,000 per year income group favored a deductible plan; 82 per cent of the doctors were in favor of a deductible contract. The \$25.00 deductible plan was most favored. A large majority of physicians did not believe the service contract should be limited to the low income group, and they did not feel that it should be an indemnity company. As to participation, 80 per cent of the physicians participated in at least one Blue Shield contract and 70 per cent participated in both the \$2,500 and \$5,000 income groups. The chief complaint of physicians against Blue Shield was "unfairness in the schedule of payment they received for their services." Fee schedules in their opinion have not been commensurate with the mounting cost of living.

If voluntary health insurance becomes too costly, compulsory health insurance may result. One insurance executive has stated that voluntary plans can be priced out of the market if patient and physician spend more than is needed merely because insurance is in force. He also mentioned the influence of the human element, which has to

be considered as in the following example. A person feeling sick may (a) shrug it off and go to work, (b) go to bed, (c) call his doctor, and (d) demand to be taken to a hospital.

I desire to plead that we do everything possible to maintain voluntary insurance plans, and I believe that without Blue Shield plans, compulsory health insurance would already have been forced upon us. Many physicians in our state are dissatisfied with our present Blue Shield plan, as evidenced by the fact that less than 50 per cent are willing to participate in it. Many have commented that they would just as soon have socialized medicine as our present Doctors' Plan.

Most of us agree that we would rather practice under the old order, without insurance, on a fee-for-service arrangement; however, we must face the fact that times have changed and some sacrifice will have to be made. Blue Shield plans offer a co-operative effort to satisfy the public and render satisfactory service, and will insure the maintenance of our doctor-patient relationship.

EDWARD W. SCHOENHEIT, M.D.

CORRESPONDENCE

To the editor:

Enclosed is a self-explanatory letter regarding my article entitled *Radiology in North Carolina: 1896-1916* (North Carolina M. J. 18:269, 1957). I hope that you will find it possible to publish it in a future issue in order to correct to some extent the injustice to Dr. Lafferty.

Sincerely yours,
William H. Sprunt, III
Chapel Hill

* * *

Dear Dr. Sprunt:

I read with interest your recent article in the NORTH CAROLINA MEDICAL JOURNAL on the history of roentgenology, and noted your letter in the next month's issue of that journal concerning the unfortunate omission of Dr. R. P. Noble's name from the list of those who made that history.

In both these writings you refer to Dr. Robert Hervey Lafferty, of Charlotte, as "Dr. R. L. Lafferty." Of course it is very

easy to alliterate, and in the first article I attributed the "R. L." to error on the part of the compositor. When it was repeated, it seemed that you had the name thus on your records.

Since all of us dislike to have liberties taken with our names, perhaps from a not entirely justifiable vanity, I am sure that Dr. Robert Hervey Lafferty's widow and his children, one of the latter a roentgenologist himself, and his many friends, would like to see the name of this great and good doctor and man appear as it was conferred on him at the baptismal font.

James M. Northington, M.D.
Charlotte

BULLETIN BOARD

COMING MEETINGS

North Carolina Board of Medical Examiners, meeting to interview candidates for licensure by endorsement—Mid Pines Hotel, Southern Pines, January 11.

Medical Society of the State of North Carolina, District Rural Health Conferences: District 1—The Armory, Edenton, January 15, 1:00 to 4:00 p.m.; District 3—Wilmington College Auditorium, Wilmington, January 23, 10:00 a.m. to 1:00 p.m.; District 5 — McCain Hospital Auditorium, McCain, January 30, 1:00 to 4:00 p.m.; District 7—Gaston County Agriculture Center, Dallas, February 5, 1:00 to 4:00 p.m.; District 9—The Armory, Lenoir, February 19, 1:00 to 4:00 p.m.

University of North Carolina School of Medicine weekly postgraduate programs: First District Medical Society, alternating between Ahoskie, Edenton, and Elizabeth City, beginning January 15 and continuing Wednesday afternoons and evenings through February 22; Raleigh, beginning January 16, and continuing Thursday afternoons and evenings through February 23.

Duke University Postgraduate Course in Gastroenterology—Durham, February 10-14.

Watts Hospital Symposium—Durham, February 12-13.

American College of Surgeons, Sectional Meeting—Hotel Heidelberg, Jackson, Mississippi, January 16-18.

American Diabetes Association, Sixth Postgraduate Course in Diabetes and Metabolic Diseases—Atlanta, Georgia, January 22-24.

A.M.A. Industrial Health Conference—Milwaukee, Wisconsin, January 27-29.

Annual Council on Medical Education and Licensure—Palmer House, Chicago, February 8-11.

Mediclinics, Third Annual Postgraduate Refresher Course—Fort Lauderdale, Florida, March 2-12.

New Orleans Graduate Medical Assembly — Roosevelt Hotel, New Orleans, March 3-6, followed by fourteenth annual post-clinical tour.

A.M.A. Conference on Rural Health — Hotel Heidelberg, Jackson, Mississippi, March 6-8.

American Academy of General Practice, Tenth Annual Scientific Assembly—Dallas Memorial Auditorium, Dallas, Texas—March 24-27.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

A number of new faculty appointments in the University of North Carolina School of Medicine has been announced by University Chancellor William B. Aycock, with the approval of President William C. Friday and the Board of Trustees.

Dr. Hans H. Strupp was appointed associate professor of psychology in the Department of Psychiatry. He is a native of Germany and comes to UNC from George Washington University, where he received his Ph.D. degree in 1954.

Dr. Billy Baggett was appointed assistant professor in the Department of Pharmacology. He is a native of Mississippi and received his Ph.D. degree from St. Louis University in 1952. Prior to accepting this appointment, Dr. Baggett was with the Harvard Medical School.

Dr. George R. Holcomb received an appointment as assistant professor in the Department of Anatomy. He is a native of Illinois and was educated at the University of Wisconsin, receiving his Ph.D. degree in 1956. He joins the faculty from Creighton University Medical School in Nebraska.

Dr. Ralph L. Dunlap was named assistant professor of psychology in the Department of Psychiatry. He is a native of Iowa and received his Ph.D. degree from Ohio State University in 1953. He comes to North Carolina from the University of Maryland Medical School.

Also, two instructors in psychology have been added to the staff of the Department of Psychiatry. They are Dr. Ehud Koch and Dr. W. E. Meaders, Jr. Both men received their Ph.D. degrees from the University of North Carolina.

A grant of \$39,325 has been made to the University of North Carolina School of Medicine by the U. S. Public Health Service for the construction of a new research laboratory.

The total cost of the project, which is expected to get underway by the end of the year, is \$78,650. The National Institutes of Health of the Public

Health Service has granted half of this sum. The remaining funds will come from other sources, including the National Hemophilia Foundation.

The new research facility will be used by the Department of Pathology for the study of hemophilia. The project will be under the direction of Dr. K. M. Brinkhous, head of the Department of Pathology.

* * *

A junior in the University of North Carolina School of Medicine, James A. Kiley of Chapel Hill, received honorable mention and a gift for a manuscript which he submitted in the Annual Schering Award Contest. Subject of the paper was "Recent Advances in the Biochemical Aspects and Treatment of Mental Disease."

Kiley completed his A.B. degree at the College of William and Mary in 1950 and his master's in business administration from the University North Carolina in 1954.

* * *

Drs. William L. Fleming, W. P. Richardson, Kerr L. White, and T. F. Williams attended the annual meeting of the Association of Teachers of Preventive Medicine and the annual meeting of the American Public Health Association in Cleveland, Ohio. Dr. Fleming was program chairman this year for the meeting of the Association of Teachers of Preventive Medicine.

* * *

Two specialists in pediatrics from Columbia University's College of Physicians and Surgeons visited the School of Medicine recently.

Dr. John Caffey, professor of radiology, and Dr. Hattie Alexander, associate professor of pediatrics, spoke to several UNC medical groups during their visit. In addition to their Columbia teaching duties, they are both attending pediatricians to Babies' Hospital and Vanderbilt Clinic in New York City.

Dr. Caffey spoke on "Mongolism and Achondroplasia," under the sponsorship of the Department of Radiology.

Dr. Alexander participated in a combined medical-pediatrics discussion of meningitis and spoke later at the North Carolina Pediatrics Society meeting in Greensboro.

* * *

Dr. Lawrence S. Kubie, Yale University psychiatrist and member of the New York Psycho-Analytic Institute, gave two talks recently in the School of Medicine at the University of North Carolina.

He spoke before the staff conference of the Department of Psychiatry. His other talk, on "The Concept of Diffuse Undifferentiated Emotional Tension," was one of a series on "Anxiety" given as part of the Medical Science Lectures to the third and fourth year medical students.

* * *

"The Medical Problems of Older People" was discussed by Dr. Kerr L. White of the School of Medicine at a recent meeting of the North Carolina Society for Crippled Children and Adults held in Durham.

Dr. White, who is associate professor in the Department of Medicine, took part in a panel discussion of "Geriatrics: Rehabilitation of the Aged." Dr. White is also a research associate in the Institute for Research in Social Science at UNC.

* * *

Dr. James T. Proctor, assistant professor of psychiatry, has been elected to a regional chairmanship in the American Association of Psychiatric Clinics for Children.

He was chosen regional chairman of the Middle Atlantic Regional Group at a recent gathering in Richmond, Virginia. Others attending from UNC were Dr. Ralph Dunlap, Dr. John Filley, Mrs. Maurice Labarre, Mrs. Harriett Wilson, and Albert Linch.

* * *

Dr. F. Verzar of Switzerland was the guest speaker at the combined staff conference of the University of North Carolina School of Medicine recently.

Dr. Verzar maintains a gerontology laboratory in the Department of Anatomy at the University in Basel, Switzerland, where he studies the problems of old age.

Dr. Verzar says of his work, "I enjoy myself with research on aging, not to increase lifetime, but to make old age enjoyable and to be able to take part in human activities."

* * *

Some 100 physicians from North Carolina, South Carolina, and Virginia attended the University of North Carolina School of Medicine Symposium at Chapel Hill on November 21 and 22.

Taking part in Thursday's program were: Dr. Truman G. Schnabel, Jr., University of Pennsylvania School of Medicine; and Dr. Charles H. Burnett, Dr. Ernest Craig, Dr. Carl Gottschalk, Drs. John M. Sorrow, James W. Woods, Jr., and Daniel T. Young, all of the University of North Carolina School of Medicine.

The following physicians took part in Friday's program: Dr. Houston S. Everett, School of Medicine, Johns Hopkins University; and from the UNC School of Medicine Drs. Charles E. Flowers, Jr., James F. Donnelly, Edward C. Curnen, Charles A. Bream, H. Robert Brashear, and Beverly Raney.

* * *

Several faculty members and one student of the University of North Carolina School of Medicine delivered papers or took part in panel discussions at the meeting of the Southern Medical Association held recently in Miami. Among them were Dr. David A. Davis, professor of surgery in charge of anesthesiology; Dr. Joseph M. Hitch, clinical associate professor of medicine; Dr. Charles E.

Flowers, associate professor of obstetrics and gynecology; Dr. Robert A. Ross, professor of obstetrics and gynecology; and Miss Nancy Pritchett, senior medical student;

Dr. Nelson K. Ordway, professor of pediatrics; Dr. Seth G. Hohart, Jr., clinical instructor in surgery; Dr. W. R. Stanford, clinical associate professor of medicine; Dr. J. U. Gunter, instructor in pathology; Dr. James E. Davis, clinical instructor in surgery; and Dr. H. R. Brashear, assistant professor of surgery in orthopedics.

Dr. Ross is chairman of the Section on Obstetrics. Dr. Ordway heads the Section on Pediatrics.

* * *

Dr. John C. Lilly spoke on "Brain Mechanisms and Motivation" at the monthly scientific meeting of the Department of Psychiatry of the University of North Carolina School of Medicine. He is chief of the Research Branch of the Section on Cortical Integration of the National Institute of Mental Health in Bethesda, Maryland.

* * *

Four members of the Department of Psychiatry of the University of North Carolina School of Medicine recently attended a meeting of the Group for the Advancement of Psychiatry in Asbury Park, New Jersey.

All four members of standing committees of the organization. They are Dr. George C. Ham, Committee on Medical Education; Dr. Lucie Jessner, Committee on Research; Dr. David A. Young (chairman) and Dr. Thomas E. Curtis, Committee on Psychiatric Nursing.

* * *

Dr. Shephard Liverant, assistant professor of psychology in the Department of Psychiatry, has resigned to accept an academic research position at Ohio State University.

* * *

A Deborah Leary Memorial Fund has been established within the Medical Foundation of North Carolina, Inc. to be used in some manner for a thesis prize, a lectureship or something similar, as an annual event at the University of North Carolina School of Medicine. Friends may contribute to this Fund by forwarding checks to the Medical Foundation marked for the Deborah Leary Memorial Fund, P.O. Box 957, Chapel Hill, North Carolina.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF PUBLIC HEALTH

The November issue of the *Journal of the American Geriatrics Society* is featuring a paper on "Accidents and the Aging" by Dr. Charles Cameron, Jr., associate professor of the University of North Carolina School of Public Health.

Based on Dr. Cameron's studies of the epidemiology of accidents, the paper presents the accident experience of the population past 50 years of age. This age group, and particularly those past 65

years of age, experience the greatest number of accident fatalities of any age group in the population, Dr. Cameron points out.

* * *

Dr. James R. Shaw, chief of the Division of Indian Health, U. S. Public Health Service, Washington, D. C., was guest speaker at the Student-Faculty Seminar of the University of North Carolina School of Public Health Monday, November 25.

While in Chapel Hill, Dr. Shaw and his associates conferred with faculty members of the School of Public Health concerning the school's contract with the Indian Service. This contract is for the training of Indian village health educators.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST COLLEGE

The Wake Forest College Board of Trustees at their meeting in November authorized that the new wing of the School of Medicine be named The James A. Gray Memorial Building. The wing, now under construction and scheduled for completion by early summer, will approximately double the present floor space and will be utilized largely for research laboratories, but will also provide additional space for library expansion, more adequate departmental and administrative offices, teaching facilities, and animal quarters. The School of Medicine was a benefactor under a trust established by the late Mr. Gray in 1947.

* * *

The School of Medicine was host to the Society of North Carolina Bacteriologists for the fall meeting on December 7. Dr. Arthur Silverstein, of the Institute of Pathology of Walter Reed Hospital, was the guest speaker. Dr. John L. Etchells, of North Carolina State College, is president of the society.

* * *

Dr. Robert W. Prichard, associate professor of pathology, has returned from a two-year tour of duty with the Public Health Service in Bangkok, Thailand.

* * *

Dr. Robert L. Tuttle, associate professor and director of the Department of Microbiology, has been awarded a travel fellowship by the China Medical Board of New York, Inc., to visit various countries in Central America during January and February, 1958. The fellowships are made available for the purpose of better acquainting teachers of parasitology from medical schools of the United States with the laboratory and clinical aspects of tropical medicine.

* * *

The Monday evening lecture schedule for the month of January 1958 includes:

January 13—A joint meeting of the Bowman Gray Medical Society and the Sigma Xi Club, when

the guest speaker will be Dr. David Rittenberg, professor of biochemistry at Columbia University.

January 20—Dr. Amoz Chernoff, associate professor of medicine, Duke University, will speak to the Bowman Gray Medical Society.

The meetings are held in the Amphitheater at 7:30 p.m., and are open to physicians and the interested public.

* * *

Dr. Norman M. Sulkin, professor of anatomy, has recently been elected to a three-year term as Council member, representing the biological sciences, of the Gerontology Society.

* * *

Among the recent grants awarded to The Bowman Gray School of Medicine through the Public Health Service are:

The mechanisms of proteinuria, Dr. William H. Boyce, Jr., \$9,306; Mechanism of action of sulfonylurea compounds, Dr. J. M. Little, \$2,300; Glaucoma study, Dr. R. Winston Roberts, \$4,025; Histochemical study of nervous system reference to aging, Dr. Norman M. Sulkin, \$6,497; Effect of copper and other metal ions on brain and liver, Dr. Martin G. Netsky, \$8,385; Experimental embolism of cerebral blood vessels, Dr. Martin G. Netsky, \$13,915; Fractions of *T. Pallidum* in a C. F. test for syphilis, Dr. Robert L. Tuttle, \$6,480.

Effect of salt loads on renal potassium content, Dr. John Felts, \$5,865; Effects of drugs on responses in vascular beds, Dr. Harold D. Green, \$16,675; Carbohydrate metabolism in pregnancy toxemia, Dr. Richard L. Burt, \$5,000; Organs of senile animal and human subjects, Dr. Warren Andrew, \$10,141; Distribution of the cardiac output, Dr. Merrill P. Spencer, \$11,241; Studies in acute and chronic arteriovenous fistulas, Dr. J. R. Bobb, \$5,750.

NEWS NOTES FROM THE DUKE UNIVERSITY SCHOOL OF MEDICINE

Created almost overnight by the stroke of the pen of Duke University's chief benefactor, James B. Duke, Duke Hospital is now in its twenty-seventh year of existence, although initial construction was begun exactly 30 years ago.

Since that first structure was completed, the hospital has experienced such a phenomenal growth that it now is the second largest private general hospital in the South.

In his indenture of December 11, 1924, James B. Duke wrote, "I have selected hospitals as another of the principal objects of this trust because I recognize that they have become indispensable institutions, not only by way of ministering to the comfort of the sick, but in increasing the efficiency of mankind and prolonging life."

It is appropriate that Founders Day exercises at Duke University this year be celebrated with the dedication of a new hospital addition which will

further fulfill the dreams about which James B. Duke wrote.

The newest addition—a \$4.5 million, seven-story structure—includes 10 operating rooms and has more than doubled the facilities for the diagnosis and treatment of outpatients.

An earlier addition in 1940 increased the number of hospital beds from the original 450 to 560, and the latest addition brings the number to 660.

As a pioneering hospital, Duke has earned a reputation for diagnosis as well as treatment and care, and during the 27 years of its existence the hospital and its associated medical school have significantly contributed to medicine through research.

Before it celebrated its first birthday, the Medical Center saw several other important firsts: the first medical and dietetic students were admitted, a course for hospital administrators was begun, and courses in X-ray technology, and tumor therapy were started.

* * *

Human skin remains alive for as long as 26 hours after a person's death, a Duke University medical research team reported recently.

Drs. Nicholas G. Georgiade and Kenneth L. Pickrell of the Duke Medical School's surgery department said that skin removed during a 26-hour period after death is as capable of growth as skin taken from a living person.

The Duke surgeons reported on the postmortem survival of skin at the annual meeting of the American Society of Plastic and Reconstructive Surgery held in San Francisco last month. They were assisted in their research by Drs. Joseph Kepes and Fred Richard (CQ) of the Medical Center.

* * *

Three children with a disease so rare that only 15 cases have been recorded in the United States are helping Duke University doctors gain knowledge that may eventually benefit other victims.

Lavanta, David and Wanda Phillips, children of Mr. and Mrs. D. L. Phillips of Fort Bragg, are afflicted with juvenile pernicious anemia—a hereditary disease that can be fatal unless properly treated.

All three have been diagnosed and treated at the Duke Medical Center. Recently they returned to Duke for a three-day round of tests aimed at helping researchers learn more about the basic cause of pernicious anemia.

NORTH CAROLINA HEART ASSOCIATION

Applications For Heart Research Grants Now Available

The North Carolina Heart Association will receive applications for research grants from now until January 15, 1958, according to Dr. Merrill Spencer of the Bowman Gray School of Medicine, Chairman of the Association's Research Committee.

Those interested in obtaining financial support for research in the cardiovascular field may request applications from state Heart headquarters at Miller Hall in Chapel Hill.

"Close to \$100,000 has already been allocated this year for heart research at the three medical centers in this state," said Dr. Spencer. "This represents grants from the American and North Carolina Heart Associations and local Heart Chapters." He pointed out that there is a ceiling of \$1,000 on grants available from the State Heart Association. "We consider these grants useful to fill in between larger grants, to take care of emergency opportunities which would be missed if the longer time required by national granting agencies is involved."

In order to serve such emergency needs, the Research Committee will meet four times a year to consider applications, Dr. Spencer stated. Another new procedure is the opening of grants to researchers in hospitals other than those connected with medical schools in the state. "We are also planning to extend a few grant opportunities to undergraduate students in the state's colleges," Dr. Spencer added.

Dr. Spencer said he could not estimate how much money would be available for meeting applications next year. "That will depend on the success of the Heart Fund Drive next February," he commented.

Gifts toward research for heart disease may be sent to the North Carolina Heart Association or to local chapters at any time during the year.

NORTH CAROLINA HEALTH COUNCIL

The results of an exhaustive study of how and to what extent the use of general hospital facilities in North Carolina is affected by age and sex, economic status, and race have been announced by the North Carolina Health Council.

The Study Committee's report shows that the ability to pay for hospital care is a major factor in determining the rate at which hospital facilities are utilized, with the highest hospital admission rates being found among groups which prepay for hospital care through Blue Cross or commercial hospital insurance, and the lowest being indigent cases receiving public assistance. Admission rates tend to decrease in almost direct proportion to the economic level, the survey revealed.

The annual rate of admission for North Carolina in general in 1956 was 118 per 1,000 persons. Among Blue Cross subscribers, the rate of admission was 152 per 1,000 subscribers.

The survey, which began in April, was made by a Health Council committee composed of state health leaders under the chairmanship of Elisha M. Herndon, executive vice president of the Hospital Care Association (Blue Cross) of Durham.

Cooperating agencies included the State Board of Public Welfare, the Duke Endowment, the North Carolina Medical Care Commission, the two North

Carolina Blue Cross Plans, Hospital Care Association of Durham, and Hospital Saving Association of Chapel Hill, the North Carolina State Medical Society and other groups.

As a result of the program of the Medical Care Commission, which started in 1946, North Carolina is almost up to the national average in the number of beds per 1,000 population in general and short term hospitals, the report says. At the end of 1956 North Carolina had 3.1 beds compared with 3.5 beds in the United States per 1000 population.

ROBESON COUNTY MEDICAL SOCIETY

The Roberson County Medical Society held its annual Ladies' Night on December 2, at the Lorraine Hotel, with 74 members, wives, and guests present. An entertaining program was presented by H. F. Seawell, Jr., of Carthage.

The following officers for the coming year were elected: president, Dr. H. M. Baker, Jr.; vice president, Dr. R. E. Hooks; secretary and treasurer, Dr. D. E. Ward, Jr.; delegates, Drs. C. E. Inman and D. E. Ward, Jr.; alternate delegates, Drs. John J. Bender and Frank P. Ward.

RANDOLPH COUNTY MEDICAL SOCIETY

At a recent meeting of the Randolph County Medical Society the following officers were elected for 1958: Drs. John Cochran, president; T. R. Cleek, vice president; H. MacM. White, secretary and treasurer. Dr. Hugh Fitzpatrick, retiring president, presided over the meeting.

Dr. Cochran graduated from the Bowman Gray School of Medicine in 1950. In 1952 he came to Asheboro, where he has been associated with Dr. B. B. Dalton.

* * *

The Randolph County Medical Society has been notified by the North Carolina State Medical Society that Dr. H. L. Griffin has been made a life member, effective January 1, 1958, following 30 years as a member of the State Society.

Dr. Griffin started practice at Star, North Carolina, in 1927. He became associated with Dr. Dempsey Barnes in Asheboro in 1934, and together, in 1938, they organized the Barnes-Griffin Clinic, now the Griffin Clinic. Dr. Barnes died in 1943.

FORSYTH COUNTY MEDICAL SOCIETY

The Forsyth County Medical Society held its regular monthly meeting in Winston-Salem on November 12. Dean E. A. Brecht of Chapel Hill served as moderator for the panel discussion which comprised the evening's program.

NEWS NOTES FROM THE AMERICAN MEDICAL ASSOCIATION "March Of Medicine" TV Program To Be Aired January 23

The work of American physicians in remote regions of the world where native populations are largely dependent upon our doctors and medicine for their health and wellbeing is the television story to be aired coast-to-coast January 23. Entitled "MD International," the hour-long show will be presented at 10 p.m. EST over the full NBC-TV network both in color and black and white. This is part of a joint American Medical Association and Smith, Kline & French Laboratories project to inform the American public of people-to-people activities in the health profession for the promotion of better international understanding.

A.M.A. Schedules Rural Health Conference March 6-8

Changing patterns in nutrition, health costs, medical care, dental health and safety will serve as the focal point for discussion at the thirteenth National Conference on Rural Health to be held March 6-8 at the Hotel Heidelberg, Jackson, Mississippi. The conference is sponsored by the A.M.A.'s Council on Rural Health in cooperation with southern state medical associations and farm, educational, and allied organizations. Following the theme—"As the World Turns"—the conference will open Thursday morning, March 6, with greetings by the governor of Mississippi, the mayor of Jackson, the president of the Mississippi State Medical Association, a member of A.M.A.'s Board of Trustees, and the chairman of the Council.

Two New A.M.A. Exhibits For 1958

Reducing and accidental poisoning of children are the themes of two new exhibits the American Medical Association is offering to medical societies early in 1958. (1) "You Can Reduce" stresses the importance of using will power in the selection of foods. The exhibit illustrates the basic foods that should be eaten every day, those to "fill up" on and those to "cut down" on. Three dimensional models depict the calorie content of certain basic foods. (2) "Poisoning of Children in the Home" pinpoints eight leading offenders, such as aspirin, kerosene, old medicines, and household chemicals. A display of products on a revolving tree-like arrangement also is included in this portable exhibit. Medical society bookings may be arranged through the Bureau of Exhibits after January 1.

AMEF State Chairmen To Meet January 25-26

The American Medical Education Foundation's 1958 fund raising drive for the nation's medical schools will be officially launched January 25-26 at a meeting for state chairmen. This seventh annual conference will be held at the Drake Hotel, Chicago. AMEF will pay the expenses of one representative from each state, although any physicians are welcome to attend.

Joint Committee Studies Medicolegal Problems

A concerted educational program on medical professional liability is being formulated by a joint committee of the American Medical Association and the American Hospital Association. Among other things, the liaison committee plans to study current medicolegal advisory set-ups in a number of states, the liability of charitable and governmental hospitals, and ways of promoting education in the professional liability field. Progress reports will be submitted to the boards of trustees of the two associations, and physicians and hospital personnel will be kept informed on all action taken through the organizations' official publications.

A.M.A. Exhibit Honored At APHA Meeting

A "certificate of merit" was awarded the American Medical Association for its exhibit on "Health Appraisal of the School Child" at a recent American Public Health Association convention in Cleveland. The exhibit illustrates examples of the various steps in a complete appraisal program from teacher observation, screening procedures, and dental and medical examinations to the follow-through. Developed by the Bureau of Exhibits in cooperation with the Bureau of Health Education, the exhibit is of interest not only to physicians but also to educators and other allied health leaders. To be the most effective, however, the exhibit should be manned by local experts in the field. Medical societies may arrange bookings through the Bureau of Exhibits.

A.M.A. Plans Second Legal Conference In May

Legal problems currently facing individual physicians and organized medicine will be the primary discussion topics at the second meeting of state and county medical society executive secretaries and attorneys May 9-10 at the Drake Hotel, Chicago. Before the final agenda can be set up, the A.M.A. Law Department hopes that medical societies will send in their suggestions on specific legal subjects that would be of the most interest to them. The first such meeting—also sponsored by the Law Department—was held in April, 1956.

Radio-TV Report Available

Medical societies interested in developing worthwhile local radio and television programs may secure copies of the summary of the recent radio-TV conference sponsored by the A.M.A. and the National Association of Radio and Television Broadcasters from the A.M.A.'s Public Relations Department. The report contains basic information and helpful hints on using local radio and television in the health field. Representatives of state and county medical societies, allied health and welfare organizations, and radio and television stations attended the two-day Chicago meeting.

Doctors To See New Medicolegal Film In June

The A.M.A. Law Department announces that "traumatic neurosis" will be the subject of the third film in the series of six medicolegal films to be produced in cooperation with the Wm. S. Merrill Company of Cincinnati. The film will delve into some of the problems that face psychiatrists and neurologists in identifying patients' psychoses resulting from various traumatic experiences. Physicians will have an opportunity to see the premiere showing of this film at the A.M.A.'s Annual Meeting in June in San Francisco.

Previous motion pictures in the series include "The Medical Witness" and "The Doctor Defendant." Other films in the series will deal with in-hospital medical professional liability problems and forensic pathology.

NATIONAL FOUNDATION FOR INFANTILE PARALYSIS

Basil O'Connor, president of the National Foundation for Infantile Paralysis, has announced that his organization has added \$1 million to its research allocation for 1958, and that the larger part of this sum will be devoted to basic research.

Among the projects which will be continued and expanded under National Foundation grants are studies of how viruses affix themselves to and invade cells, studies on the composition and structure of viruses, studies of the structure and function of nucleic acid (a key chemical found in all living things), studies of recently discovered viruses whose relationship to disease is still not wholly understood, studies of reasons why certain drugs inhibit virus growth, and studies of the properties of cells which appear to have become malignant as they have been grown in laboratories.

The additional \$1 million brings to \$4,700,000 the National Foundation's research need for 1958, the largest in the organization's history.

BUREAU OF OLD-AGE AND SURVIVORS INSURANCE

The Bureau of Old-Age and Survivors Insurance, Social Security Administration, has announced vacancies for full-time and part-time Medical Consultants in its Division of Disability Operations. The Division is responsible for making determinations of disability under the disability insurance provisions of the Social Security Act. These positions are available in the headquarters offices in Baltimore, Maryland.

The full-time positions are under Civil Service and incumbents will receive all Federal Civil Service benefits such as retirement, life insurance, and vacation and sick leave privileges. The salary range is \$10,065 to \$11,355 a year depending on the individual's qualifications. The salary in part-time positions is paid on a *per diem* basis.

An article describing in greater detail the basic

medical aspects of disability insurance operations under the Social Security Act may be found in the January 15, 1955, issue of the *Journal of the American Medical Association*, pages 270 and 271. Copies of this article are available on request.

Physicians interested in either full-time or part-time positions may write to Dr. Arthur B. Price, Chief Medical Consultant, Division of Disability Operations, 200 West Baltimore Street Baltimore 1, Maryland, for further information.

1958 MISSISSIPPI VALLEY MEDICAL SOCIETY ESSAY CONTEST

The attention of physician medical writers is called to the Mississippi Valley Medical Society Annual Essay Contest. Any subject of general medical or surgical interest including medical economics and education may be submitted, providing the paper is unpublished and is of interest and applicable value to general practitioners of medicine.

Contributions are accepted only from physicians who are members of the A.M.A. and who are residents and citizens of the United States. Manuscripts must not exceed 5,000 words and be submitted in five complete copies, in manuscript style. The winning essay receives a cash prize of \$100.00, a gold medal, and a certificate, as well as an invitation to address the annual meeting of the Mississippi Valley Medical Society. (Held at time

and place of the American Medical Writers' Association; 1958 meeting, Hotel Morrison, Chicago, September 24, 25, 26.) The Society may also award certificates of merit to physicians whose essays rate second and third best. Essays must be in the office of the M.V.M.S. Secretary not later than May 1, 1958. Winning essays are published each year in the January Mississippi Valley Medical Journal. Further details may be secured from Harold Swanberg, M.D., Secretary, 209-224 W.C.-U. Building, Quincy, Illinois.

MEDICLINICS REFRESHER COURSE

MEDICLINICS third annual postgraduate refresher course will be held in Fort Lauderdale, Florida, March 2-12, 1958.

The American Academy of General Practice has certified this course for 32 hours of formal postgraduate study—Category 1—for those Academy members in attendance.

The tuition fee for the course is \$50.00, payable in advance. Checks should be made payable to Mediclinics and mailed to Mediclinics of Minnesota, 601 Medical Arts Building, Minnesota 2, Minnesota. This should be done promptly, as registration will be closed when our limit is reached. Those planning to attend any of the luncheon meetings should indicate their preference and add an additional \$2.50 for each luncheon meeting selected.

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AMERICAN ACADEMY OF GENERAL PRACTICE

The tenth annual scientific assembly of the American Academy of General Practice will give more than 8,000 family doctors, residents, interns, and guests an opportunity to hear 35 medical experts discuss subjects ranging from teen-age problems to old-age problems and from heart disease and ulcers to eye ailments, fractures, and the hypnotized patient. The four-day Assembly opens March 24 in the new Dallas Memorial Auditorium.

The Academy's policy-making Congress of Delegates will convene Saturday, March 22. All sessions of the Congress and many social functions will be held in the Statler Hilton Hotel.

Wednesday evening, March 26, following induction ceremonies for Academy President-elect Holland T. Jackson, Fort Worth, Texas, more than 3,000 guests will attend a president's reception and dance honoring Dr. Malcom E. Phelps, El Reno, Oklahoma, president of the academy.

AMERICAN COLLEGE OF SURGEONS

All members of the medical profession are invited to attend a three-day Sectional Meeting of the American College of Surgeons in Jackson, Mississippi, January 16 through 18, at the Hotel Heidelberg.

Dr. J. Harvey Johnston, Jr., clinical assistant professor of surgery, University of Mississippi School of Medicine, is chairman of the Local Advisory Committee on Arrangements.

Topics will include Complications of Abdominal Surgery, Chemotherapy, Metastasis and Limitations of Surgery for Cancer, Common Errors in Management of Fractures, Pediatric Surgery, Management of Multiple Injuries, New Horizons in Cardiac and Lung Surgery, Nutrition Therapy, and Transfusions. Medical motion pictures will be shown each day.

Hodding Carter, owner and publisher of the Delta Democrat Times will be the dinner guest speaker Friday evening.

INSTITUTE OF INDUSTRIAL HEALTH

The University of Cincinnati's Institute of Industrial Health is offering graduate fellowships in Industrial Medicine. The Institute, which is in the Graduate School of Arts and Sciences, provides professional training for graduates of approved medical schools who have completed at least one year of internship.

The three-year course of instruction, leading to the degree of Doctor of Science in Industrial Medicine, satisfies the training requirements for certification in Occupational Medicine by the American Board of Preventive Medicine. Two years are devoted to intensive academic and clinical study in the field of industrial medicine. A final year is spent in residency in an industrial

medical department or in some comparable organization.

Requests for additional information should be addressed to Secretary, Institute of Industrial Health, College of Medicine, Eden and Bethesda Avenues, Cincinnati 19, Ohio.

MEDICAL LIBRARY ASSOCIATION

The Fifty-seventh annual meeting of the Medical Library Association will be held in Rochester, Minnesota from June 2 through June 6, 1958, with headquarters at the Hotel Kahler. The theme of the Rochester meeting will be "Advances in Medical Library Practice". Mr. Thomas E. Keys, librarian of the Mayo Clinic, is convention chairman, and letters of inquiry should be addressed to him.

A series of refresher courses embracing many fields of medical library work will be given Saturday, May 31. It will be possible for each participant to take four courses during the day, two in the morning and two in the afternoon. Each session will be one and half hours in length, the hour for a prepared lecture and a half hour for a discussion period.

Among the high lights of the regular program will be a panel discussion on what the medical specialists expect from the medical library. Speakers will be from the Mayo Clinic Staff.

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PAN AMERICAN SANITARY BUREAU

Dr. M. G. Candau, Director-General of the World Health Organization, has accepted the offer made by the World Health Assembly that met in Geneva last May to renew his contract to head the Organization for a second term. In his acceptance, Dr. Candau asked that the renewal be made for two years, starting July 21, 1958 when his present term of office expires.

The Assembly President, Dr. Sabih Hassan Al-Wahbi (Iraq) has notified all 88 Member States and the WHO Executive Board of this decision and of the fact that he is signing the new contract on behalf of the Organization.

Dr. Candau is the author of numerous scientific papers covering a wide range of subjects including, among others, malaria, parasitology, public health administration, biostatistics, rural hygiene.

(Bulletin Board continued on page 588)

Classified Advertisements

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BOOK REVIEWS

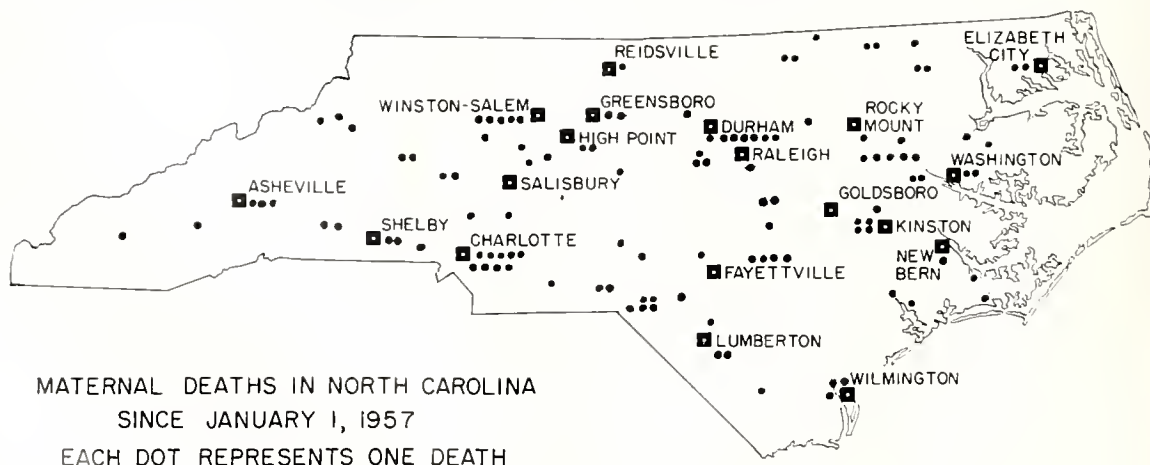
General Urology. By Donald R. Smith, M.D. 328 pages. Price, \$4.50. Las Altos, California: Lange Medical Publications, 1957.

In this book the author presents his version of available diagnostic and therapeutic techniques for the management of diseases of the genitourinary system. The presentation is designed for medical students and for the medical practitioner who has had no special training in urology. The subject matter is presented in outline form, arranged in 25 chapters which cover the material as thoroughly as a text of this type could do. The chapters are well illustrated with pen and ink sketches and photographic reproduction of roentgenograms. Controversial issues are carefully avoided by presenting only one method of management for any given disease state.

The book is admirably suited to the purposes for which it is intended—namely, to serve as a general review for the medical student and as a diagnostic handbook for the medical practitioner.

Heredo-Retinopathia Congenitalis Monohybrida Recessiva Autosomalis: A Genetical-Statistical Study. By Carl Henry Alström and Olof Olson. 177 pages. Berlingska Boktryckeriet, Lund, 1957. (Also published as a Supplement to *Hereditas*, vol. 43.)

This monograph reports detailed clinical and genetic investigations of 105 families containing 175 children with congenital blindness of a type not previously well defined. The proband cases were obtained from among the students at the Swedish school for blind children, and included those with a diagnosis of congenital "retinochoroiditis" and also those with a diagnosis of amaurosis or amblyopia congenita without known cause. The investigators present impressive evidence to



show that this group of cases with rather wide variation in clinical findings actually constitutes a single determined nosologic entity. The condition is characterized by severe visual disability, probably congenital and recognized during the first year of life. Many affected children show no demonstrable fundus changes (28 per cent of those under 15 years of age), but changes in the fundus are slowly progressive and are found in 95 per cent of patients past 45 years of age. Fundal changes in the younger patients consist of minute, round, pale spots that are scarcely visible scattered in the periphery. Small round or irregular spots of black pigment, sparsely scattered, usually appear at the periphery, and spread very slowly with advancing age. After several years, round or irregular pigmentations of varying size predominate. In long-standing cases there are fairly large patches of retinochoroidal atrophy with pigmentation and white scleral areas. Some atrophy of the disc and a moderate degree of narrowing of the vessels are often found, but these signs are not nearly so conspicuous as those found in cases of retinitis pigmentosa. Cataract is found in 10 per cent of the patients under age 15, and the incidence increases with age to 30 per cent in those past 45 years. Keratoconus is also found in about 5 per cent of children, and also increases in incidence to about 30 per cent in those over 45 years of age. Nystagmus was found in practically all patients. There was no evidence of tubular vision in those with visual acuity sufficient to permit testing.

Extensive family investigations were carried out. Evidence that patients with wide variation in clinical appearance actually belong to the same clinical entity is provided by the finding of cases of various types within a single sibship, and in different sibships within large family complexes. Progressive development of the lesions was also followed over long periods in a number of cases.

Genetic analysis of the sibship data by three different methods gave a good statistical fit to the hypothesis that the affected individuals were homozygous for a mutant autosomal recessive gene. Genealogic investigation showed that at least 29 of the 105 families belonged to five large kindred complexes. The parents of affected children were first cousins in 16 per cent of cases. The mean coefficient of inbreeding was calculated to be 5 to 10 times higher than that of the general Swedish population. The frequency of the trait in the general population of Sweden was estimated at about 3 in 100,000, but this accounted for nearly 10 per cent of children admitted to the school for the blind.

It seems to the reviewer that this study should establish heredo-retinopathia congenitalis as a clinical entity of defined etiology, and would include

many cases of blindness in children now diagnosed as amblyopia or amaurosis without known cause, retinochoroiditis without known cause, and some cases of "atypical" retinitis pigmentosa.

In Memoriam

DEBORAH CUSHING LEARY WELT, M.D.*
1912 — 1957

Deborah Cushing Leary Welt* joined us during the busy summer of 1952 and all of us knew at once that she belonged. There was no adjustment, no misstep, no jar, but all felt the benefit, the serenity, and the sharing of her presence.

By background, inheritance, and training she was a fine woman and a fine doctor; her grandfather was of that noted group of Boston gynecologists who learned from the teachings of Dr. Oliver Wendell Holmes; her father was a distinguished and beloved pathologist who served many of the Boston hospitals; her mother still carries on this service to hospitals and clinics; and one sister also is a doctor.

Dr. Leary graduated from Vassar College and after graduating in medicine from Yale University, she sought training at the New Haven and Johns Hopkins hospitals, the New England Hospital for Women and Children, and the Free Hospital for Women. In 1941 she and Dr. Lou Welt were married. She spent four profitable years as a professional associate on the Committee on Human reproduction of the National Research Council. Her concise working, scrupulous thinking, and God-given charity were nationally appreciated.

She was a member of the Durham-Orange County Medical Society, the North Carolina State Medical Society, and the Southern Medical Society, the American Medical Association; the North Carolina Obstetrical and Gynecological Society, and the South Atlantic Association of Obstetricians and Gynecologists. She was a diplomate of the National Board of Medical Examiners and of the American Board of Obstetrics and Gynecology, and a member of the American College of Obstetricians and Gynecologists, and the American College of Surgeons, the New York Academy of Science, and Sigma Xi. She was an editor of *Sterility and Infertility* and past secretary of this organization.

Her husband, Dr. Lou Welt, is in Chapel Hill among his friends and her friends.

There is one less who loved us, but infinitely sadder there is one less for us to love.

Submitted by Dr. Robert A. Ross,
Professor and Chairman, Department
of Obstetrics and Gynecology

*Deborah Cushing Leary, 1912-1957, Associate Professor of Obstetrics and Gynecology, 1952-1957, University of North Carolina School of Medicine.



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APRIL 29-30, MAY 1 and 2, 1956

Supplement to the North Carolina Medical Journal, April, 1957

BRIEFED AND ABRIDGED BY JAMES T. BARNES, EXECUTIVE SECRETARY

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1956
TRANSACTIONS
OF THE
MEDICAL SOCIETY
OF THE STATE OF NORTH CAROLINA

ONE HUNDRED SECOND ANNUAL SESSION

held at

PINEHURST, NORTH CAROLINA
APRIL 29-30 and MAY 1 and 2, 1956

President, James P. Rousseau, M.D., Winston-Salem
Secretary-Treasurer, Millard D. Hill, M.D., Raleigh
Executive Secretary, James T. Barnes, Raleigh

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Medical Society of the State of North Carolina

OFFICERS 1955-1956

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First Vice-President—EDWARD W. SCHOENHEIT, M.D., 46 Haywood Street, Asheville
Second Vice-President—MILTON S. CLARK, M.D., 401 Bank of Wayne Bldg., Goldsboro
Secretary-Treasurer—MILLARD D. HILL, M.D., 15 W. Hargett Street, Raleigh
Executive Secretary—MR. JAMES T. BARNES, 203 Capital Club Bldg., Raleigh

The President, Secretary-Treasurer, and Executive Secretary are members
ex-officio of all committees

COUNCILORS 1955-1958

First District—T. P. BRINN, M.D., 25 Market Street, Hertford
VICE COUNCILOR—Q. E. COOKE, M.D., Murfreesboro
Second District—FREDERICK P. BROOKS, M.D., 525 Evans St., Greenville
VICE COUNCILOR—F. M. SIMMONS PATTERSON, M.D., P.O. Box 814, 408 Broad St.,
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Sixth District—GEO. W. PASCHAL, JR., M.D., 311 Land Bldg., Raleigh
VICE COUNCILOR—RIVES W. TAYLOR, M.D., Box 1008, Oxford
Seventh District—LESLIE M. MORRIS, M.D., Medical Bldg., Gastonia
VICE COUNCILOR—JAMES F. REINHARDT, M.D., Crowell Hospital, Lincolnton
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VICE COUNCILOR—HARRY L. JOHNSON, M.D., Box 530, Elkin
Ninth District—JOHN C. REECE, M.D., Grace Hospital, Morganton
VICE COUNCILOR—FRANK W. JONES, M.D., Catawba Hospital, Newton
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VICE COUNCILOR—BURNICE E. MORGAN, M.D., 304 Medical Bldg., Asheville
Speaker of House of Delegates—G. WESTBROOK MURPHY, M.D., 611 Flatiron Building,
Asheville
Vice Speaker of House of Delegates—LENOX D. BAKER, M.D., Duke Hospital, Durham

The above-named officers, councilors, and speakers constitute the Executive Council of the Society which has interim authority over the affairs of the Society between annual meetings of the House of Delegates.

SECTION CHAIRMEN — 1955-1956

General Practice of Medicine and Surgery—WILLIAM P. KAVANAGH, M.D., Cooleemee
Practice of Medicine—KENNETH D. WEEKS, M.D., 1605 W. Thomas St., Rocky Mount
Ophthalmology and Otolaryngology—JOHN S. GORDON, M.D., 412 N. Church St.,
Charlotte
Surgery—JAMES F. MARSHALL, M.D., 310 W. 4th Street, Winston-Salem
Pediatrics—PAUL F. MANESS, M.D., 321 W. Front St., Burlington
Gynecology and Obstetrics—JAMES F. DONNELLY, M.D., State Board of Health,
Raleigh
Public Health and Education—A. HUGHES BRYAN, M.D., School of Public Health,
Chapel Hill
Neurology and Psychiatry—THOMAS W. FARMER, M.D., N. C. Memorial Hospital,
Chapel Hill
Radiology—THOMAS G. THURSTON, M.D., 512 Mocksville Ave., Salisbury
Pathology—JOHN C. REECE, M.D., Grace Hospital, Morganton
Anesthesia—LEONARD NANZETTA, M.D., City Hospital, Winston-Salem

EARLY HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM ORGANIZATION TO 1804

Date	Place	President	Vice Presidents	Corresponding Secretary	Secretary	Recording Secretary	Treasurer	Censors
Dec. 17, 1799, or April 16, 1800	Raleigh	Richard Fenner	Nathaniel Loomis John Claiborne	Calvin Jones		Wm. B. Hill	Cargill Massenburg	Sterling Wheaton James Webb Jas. John Pasteur Jason Hand
Dec. 1, 1800	Raleigh	Richard Fenner			Sterling Wheaton			
Dec. 1, 1801	Raleigh	John C. Osborne	Thomas Mitchell Richard Fenner	Calvin Jones	Sterling Wheaton		Cargill Massenburg	James Webb John Sibley
1802	Raleigh	John C. Osborne		Calvin Jones				
1803	Raleigh	John C. Osborne		Calvin Jones				
1804	Raleigh	John C. Osborne		Calvin Jones				

HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM 1849 TO 1956

*Missing Data Not to be Found in Record

Date	Place of Meeting	Number in Attendance	President	Vice Presidents*	Secretary	Treasurer*	Members on Roll*	Honorary Members*	Honorary
1849	Raleigh	25	F. J. Hill		W. H. McKee		25		
1 1850	Raleigh	21	E. Strudwick	F. J. Haywood, C. E. Johnson, J. E. Williamson, W. G. Thomas	W. H. McKee	W. G. Hill	38	9	
2 1851	Raleigh	23	E. Strudwick	C. E. Johnson	W. H. McKee	W. G. Hill	46	0	
3 1852	Wilmington	38	J. E. Williamson	Thomas N. Cameroo, William G. Hill, Johnston B. Jones, N. J. Pittman	E. B. Haywood	J. J. W. Tucker	72	12	
4 1853	Fayetteville	24	J. E. Williamson	William G. Hill, Johnston B. Jones, J. B. G. Myers, N. J. Pittman	W. W. Harris	Daniel Dupree	80	14	
6 1854	Raleigh	37	J. H. Dickson	N. J. Pittman, J. B. G. Myers, J. Graham Tull, A. D. McLean	S. S. Satchwell	Daniel Dupree	84	17	
6 1855	Salisbury	23	J. H. Dickson	J. Graham Tull, Owen Hadley, A. D. McLean, Hugh Kelly	S. S. Satchwell	J. B. Dunn	96	18	
7 1856	Raleigh	35	C. E. Johnson	Marcellus Whitehead, E. R. Gibson, Johnston B. Jones, O. F. Manson	S. S. Satchwell	J. B. Dunn	101	22	
8 1857	Edenton	25	C. E. Johnson	Marcellus Whitehead, O. F. Manson, H. W. Faison, E. T. Gibson	W. G. Thomas	J. B. Dunn	113	16	
9 1858	New Bern	69	W. H. McKee	Edward Warren, C. W. Graham, Caleb Winslow, A. B. Pierce	W. G. Thomas	J. B. Dunn	172	18	
10 1859	Statesville	81	W. H. McKee	James G. Ramsey, P. E. Hines, J. R. Mercer, W. T. Howard	W. G. Thomas	C. W. Graham			
11 1860	Washington	64	N. J. Pittman	P. T. Henry, R. H. Winborne, M. Whitehead, T. S. Leach	W. G. Thomas	C. W. Graham	233	18	
12 1861	Morganton	23	N. J. Pittman	J. J. Summerell, C. T. Murphy, G. W. Hodges, W. A. B. Norcom	W. G. Thomas	C. W. Graham	244	18	
13 1866	Raleigh	20	J. J. Summerell	E. Burke Haywood, R. H. Winborne, W. L. Barrow, J. W. Jones	W. G. Thomas	C. W. Graham			
14 1867	Tarboro	41	W. G. Thomas		S. S. Satchwell	C. W. Graham	288	11	
15 1868	Warrenton	27	S. S. Satchwell	Hugh Kelly, George A. Foote, Charles J. O'Hagan, J. H. Baker	Thomas F. Wood	J. W. Jones			
16 1869	Salisbury	36	E. B. Haywood	Thomas E. Wilson, A. B. Pierce, C. T. Murphy, M. A. Locke	Thomas F. Wood	J. W. Jones			
17 1870	Wilmington	38	C. J. O'Hagan	E. A. Anderson, F. N. Luckey, W. R. Sharpe, R. L. Payne	Thomas F. Wood	J. W. Jones			
18 1871	Raleigh	35	Hugh Kelley	D. N. Patterson, R. C. Pearson, J. B. Seavy, G. L. Kirby	Thomas F. Wood	J. W. Jones			
19 1872	New Bern	34	W. G. Hill	H. W. Faison, R. F. Hicks, G. H. Macon, W. A. B. Norcom	James McKee	J. W. Jones			
20 1873	Statesville	43	M. Whitehead	W. T. Ennett, William Little, Charles Duffy, P. T. Jermain	James McKee	H. T. Bahnson			
21 1874	Charlotte	56	W. A. B. Norcom	J. B. Jones, R. F. Lewis, C. G. Cox, J. L. Knight	James McKee	H. T. Bahnson			
22 1875	Wilson	80	J. W. Jones	Walker Debnam, J. A. Gibson, William Little, D. N. Patterson	James McKee	H. T. Bahnson	148	5	
23 1876	Fayetteville	33	Peter E. Hines	J. H. Baker, G. G. Smith, T. D. Haigh, J. K. Hall	James McKee	H. T. Bahnson	157	4	
24 1877	Salem	42	George A. Foote	J. K. Hall, B. W. Robinson, A. Holmes, A. A. Hill	James McKee	A. G. Carr	177	4	
25 1878	Goldsboro	79	R. L. Payne	E. M. Rountree, Richard Anderson, S. B. Flowers, L. A. Stith	L. J. Picot	A. G. Carr	194	6	
26 1879	Greensboro	109	Chas. Duffy, Jr.	J. A. Gibson, Willis Alston, James McKee, A. A. Hill	L. J. Picot	A. G. Carr	198	6	
27 1880	Wilmington	105	J. F. Shaffner	J. K. Hall, W. C. McDuffie, W. R. Wilson, R. F. Lewis	L. J. Picot	A. G. Carr	225	6	
28 1881	Asheville	92	R. B. Haywood	J. E. McRee, W. H. Lilly, R. H. Speight, W. J. H. Bellamy	L. J. Picot	A. G. Carr	254	8	
29 1882	Concord	65	Thos. F. Wood	T. J. Moore, D. J. Cain, S. E. Evans, John McDonald	L. J. Picot	A. G. Carr	297	7	
30 1883	Tarboro	112	J. K. Hall	A. W. Knox, J. M. Hadley, E. S. Foster, John Whitehead	L. J. Picot	A. G. Carr	310	7	
31 1884	Raleigh	112	A. B. Pierce	F. W. Potter, G. W. Graham, R. Dillard, G. W. Long	L. J. Picot	A. G. Carr	348	7	
32 1885	Durham	173	W. C. McDuffie	James McKee, T. E. Anderson, W. H. Whitehead, A. G. Carr	W. C. Murphy	R. L. Payne, Jr.	424	6	

HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM 1849 TO 1956—Continued

*Missing Data Not to be Found in Record

Date	Place of Meeting	Number in Attendance	President	Vice Presidents	Secretary	Treasurer	Members on Roll July 15	Honorary Members	Honorary Fellows*
1886	New Bern.....	113	Joseph Graham.....	H. T. Bahnson, L. J. Picot, J. L. McMillan, W. W. Faison.....	J. M. Baker.....	R. L. Payne, Jr.....	438	7	-----
1887	Charlotte.....	112	H. T. Bahnson.....	G. G. Smith, J. L. Nicholson, C. M. Van Poole, H. B. Ferguson.....	J. M. Baker.....	R. L. Payne, Jr.....	452	7	-----
1888	Fayetteville.....	133	T. D. Haigh.....	W. I. Ennett, J. A. Dunn, I. E. Anderson.....	J. M. Baker.....	C. M. Van Poole.....	306	6	-----
1889	Elizabeth City.....	50	W. T. Ennett.....	W. J. Jones, S. W. Stevenson, G. W. Long.....	J. M. Baker.....	C. M. Van Poole.....	410	6	-----
1890	Oxford.....	160	G. G. Thomas.....	R. L. Payne, Jr., Richard Dillard, S. D. Booth.....	J. M. Hays.....	C. M. Van Poole.....	414	6	-----
1891	Asheville.....	135	R. H. Lewis.....	S. W. Battle, J. L. Nicholson, W. H. Lilly.....	J. M. Hays.....	C. M. Van Poole.....	422	6	-----
1892	Wilmington.....	162	W. T. Cheatham.....	T. S. Burbank, J. W. Long, W. H. H. Cobb, W. D. Hilliard.....	J. M. Hays.....	C. M. Van Poole.....	431	6	-----
1893	Raleigh.....	221	J. W. McNeill.....	W. C. Ganoway, H. H. Harris, J. M. Hadley, Thomas Hill.....	R. D. Jewett.....	M. P. Perry.....	447	5	3
1894	Greensboro.....	166	W. H. H. Cobb.....	J. A. Hodges, R. W. Tate, Willis Aiston, M. H. Fletcher.....	R. D. Jewett.....	M. P. Perry.....	454	5	3
1895	Goldstboro.....	-----	J. H. Tucker.....	J. Howell Way, W. H. Harrell, O. McMullan, C. A. Misenheimer.....	R. D. Jewett.....	M. P. Perry.....	436	7	3
1896	Winston-Salem.....	158	R. L. Payne.....	S. D. Booth, J. P. Munroe, J. A. Burroughs, J. E. Grimsley.....	R. D. Jewett.....	M. P. Perry.....	452	7	3
1897	Morehead City.....	103	P. L. Murphy.....	J. C. Walton, A. A. Kent, M. R. Adams, B. L. Long.....	R. D. Jewett.....	M. P. Perry.....	406	6	3
1898	Charlotte.....	-----	Francis Duffy.....	E. C. Register, A. T. Cotton, J. H. B. Knight, F. H. Russell.....	R. D. Jewett.....	M. P. Perry.....	437	6	21
1899	Asheville.....	152	L. J. Picot.....	I. W. Faison, J. W. White, H. H. Dodson, W. C. Brownson.....	Geo. W. Presley.....	G. T. Sikes.....	489	6	16
1900	Tarboro.....	115	George W. Long.....	C. M. Van Poole, James M. Parrott, T. B. Williams, W. D. Hilliard.....	Geo. W. Presley.....	G. T. Sikes.....	482	6	21
1901	Durham.....	186	Julian M. Baker.....	M. H. Fletcher, C. A. Julian, D. A. Stanton, E. M. Summerell.....	Geo. W. Presley.....	G. T. Sikes.....	515	5	18
1902	Wilmington.....	147	Robert S. Young.....	A. G. Carr, E. D. Dixon-Carroll, I. M. Taylor, J. M. Parrott.....	Geo. W. Presley.....	G. T. Sikes.....	546	5	20
1903	Hot Springs.....	155	A. W. Knox.....	E. G. Moore, C. A. Julian, W. W. McKenzie, J. L. Nicholson.....	J. Howell Way.....	G. T. Sikes.....	530	6	19
1904	Raleigh.....	32*	H. B. Weaver.....	John Hey Williams, John C. Rodman, S. F. Pfohl.....	J. Howell Way.....	G. T. Sikes.....	1,033	8	17
1905	Greensboro.....	361	David T. Tayloe.....	C. A. Julian, John T. Burrus, I. W. Faison.....	J. Howell Way.....	G. T. Sikes.....	1,175	8	17
1906	Charlotte.....	406	E. C. Register.....	L. B. McBrayer, W. H. Cobb, Jr., W. O. Spencer.....	J. Howell Way.....	G. T. Sikes.....	1,234	8	16
1907	Morehead City.....	217	Samuel D. Booth.....	C. M. Strong, J. E. McLaughlin, W. F. Hargrove.....	David A. Stanton.....	H. McK. Tucker.....	888	7	16
1908	Winston-Salem.....	372	J. Howell Way.....	J. E. Stokes, J. A. Turner, W. H. Dixon.....	David A. Stanton.....	H. McK. Tucker.....	998	7	28
1909	Asheville.....	337	I. F. Highsmith.....	C. M. Van Poole, D. A. Garrison, D. O. Dees.....	David A. Stanton.....	H. McK. Tucker.....	1,067	7	25
1910	Wrightsville Beach.....	276	J. A. Burroughs.....	E. J. Wood, John Q. Myers, L. D. Wharton.....	David A. Stanton.....	H. D. Walker.....	1,080	8	35
1911	Charlotte.....	412	E. J. Wood.....	C. M. Van Poole.....	David A. Stanton.....	H. D. Walker.....	880	8	45
1912	Hendersonville.....	296	A. A. Kent.....	J. V. McGougan, W. E. Warren, L. N. Glenn.....	David A. Stanton.....	H. D. Walker.....	950	8	44
1913	Morehead City.....	232	J. P. Munroe.....	J. P. Munroe, W. P. Horton, J. G. Murphy.....	John A. Ferrell.....	H. D. Walker.....	1,133	8	40
1914	Raleigh.....	431	J. M. Parrott.....	F. R. Harris, E. S. Bullock, L. B. Morse.....	John A. Ferrell.....	H. D. Walker.....	1,228	8	47
1915	Greensboro.....	443	L. B. McBrayer.....	E. T. Dickinson, J. T. J. Battle, D. E. Sevier.....	John A. Ferrell.....	H. D. Walker.....	1,221	9	68
1916	Durham.....	406	M. H. Fletcher.....	J. J. Phillips, C. W. Moseley, S. M. Crowell.....	Benj. K. Hays.....	W. M. Jones.....	1,228	10	79
1917	Asheville.....	280	Charles O. H. Laughinghouse.....	J. L. Nicholson, L. N. Glenn, W. H. Hardison.....	Benj. K. Hays.....	W. M. Jones.....	1,271	11	81
1918	Pinehurst.....	291	I. W. Faison.....	D. J. Hill, J. L. Spruill, J. H. Shuford, Wm. deB. MacNider, Jos. B. Greene, Ben F. Royal.....	Benj. K. Hays.....	W. M. Jones.....	1,087	11	81
1919	Pinehurst.....	335	Cyrus Thompson.....	J. W. Halford, T. W. Davis, A. McN. Blair.....	Sec.-Treas. Benj. K. Hays.....	Acting Sec.-Treas. L. B. McBrayer.....	1,306	11	100
1920	Charlotte.....	479	C. V. Reynolds.....	H. D. Walker, F. Stanley Whitaker, Thos. I. Fox.....	Benj. K. Hays.....	L. B. McBrayer.....	1,497	12	100
1921	Pinehurst.....	404	I. E. Anderson.....	C. S. Lawrence, W. H. Ward, J. M. Manning.....	Benj. K. Hays.....	L. B. McBrayer.....	1,491	12	93
1922	Winston-Salem.....	507	H. A. Royster.....	J. W. Parrott, B. C. Nalle, J. R. McCracken.....	Sec.-Treas. L. B. McBrayer.....	Acting Sec.-Treas. L. B. McBrayer.....	1,571	12	100
1923	Asheville.....	356	J. W. Long.....	F. M. Haues, T. C. Johnson, B. L. Long.....	Benj. K. Hays.....	L. B. McBrayer.....	1,592	9	101
1924	Raleigh.....	525	J. V. McGougan.....	J. L. Spruill, Eugene B. Glenn, D. A. Garrison.....	Benj. K. Hays.....	L. B. McBrayer.....	1,604	9	106
1925	Pinehurst.....	550	Albert Anderson.....	W. L. Dunn, A. E. Bell, K. G. Averitt.....	Benj. K. Hays.....	L. B. McBrayer.....	1,657	10	116
1926	Wrightsville Beach.....	445	Wm. deB. MacNider.....	J. P. Matheson, W. W. Dawson, H. H. Bass.....	Benj. K. Hays.....	L. B. McBrayer.....	1,663	10	107
1927	Durham.....	653	John Q. Myers.....	J. W. Carroll, A. Y. Linville, C. H. Cooke.....	Benj. K. Hays.....	L. B. McBrayer.....	1,691	10	121
1928	Pinehurst.....	611	John T. Burrus.....	G. H. Macon, R. F. Leinbach, W. R. Griffin.....	Benj. K. Hays.....	L. B. McBrayer.....	1,738	11	143
1929	Greensboro.....	671	Thurman D. Kitchin.....	W. L. Dunn, Asheville, D. T. Tayloe, Jr., Washington, W. D. James, Hamlet.....	Benj. K. Hays.....	L. B. McBrayer.....	1,666	11	146
1930	Pinehurst.....	701	I. A. Crowell.....	W. B. Murphy, Wm. E. Warren, N. B. A. Latus.....	Benj. K. Hays.....	L. B. McBrayer.....	1,711	11	155

HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM 1849 TO 1956—Continued

Date	Place of Meeting	Number in Attendance	President	President-Elect	Vice Presidents	Sec.-Treas.	Members on Roll July 15	Honorary Members	Life Members
78 1931	Durham.....	714	J. G. Murphy.....	M. L. Stevens.....	C. A. Julian, Greensboro J. W. Davis, Statesville.....	L. B. McBrayer.....	1,600	10	164
79 1932	Winston-Salem.....	740	M. L. Stevens.....	Jno. B. Wright.....	C. W. Banner, Greensboro W. W. Sawyer, Elizabeth City.....	L. B. McBrayer.....	1,559	10	166
80 1933	Raleigh.....	714	Jno. B. Wright.....	I. H. Manning.....	J. R. McCracken, Waynesville.....	L. B. McBrayer.....	1,363	10	181
81 1934	Pinehurst.....	728	I. H. Manning.....	P. P. McCain.....	W. G. Suiter, Weldon R. L. Felts, Durham.....	L. B. McBrayer.....	1,563	10	210
82 1935	Pinehurst.....	706	P. P. McCain.....	Paul H. Ringer.....	H. D. Walker, Elizabeth City..... J. F. McKay, Buie's Creek William Allan, Charlotte.....	L. B. McBrayer.....	1,619	10	215
83 1936	Asheville.....	583	Paul H. Ringer.....	C. F. Strosnider.....	J. K. Pepper, Winston-Salem E. S. Bulluck, Wilmington.....	L. B. McBrayer.....	1,462	10	235
84 1937	Winston-Salem.....	767	C. F. Strosnider.....	Wingate M. Johnson.....	C. A. Woodard, Wilson Jno. F. Brownberger, Fletcher.....	L. B. McBrayer.....	1,563	7	253
85 1938	Pinehurst.....	602	Wingate M. Johnson.....	J. Buren Sidbury.....	R. B. McKnight, Charlotte J. F. Abel, Waynesville.....	T. W. M. Long.....	1,715	7	284
86 1939	Cruise to Bermuda..	19	J. Buren Sidbury.....	William Allao.....	C. B. Williams, Elizabeth City M. D. Hill, Raleigh.....	T. W. M. Long.....	1,605	8	313
87 1940	Pinehurst.....	35	William Allan.....	Hubert B. Haywood.....	F. Webb Griffith, Asheville Frank C. Smith, Charlotte.....	T. W. M. Long.....	1,661	7	311
88 1941	Pinehurst.....	65	Hubert B. Haywood.....	F. Webb Griffith.....	D. W. Holt, Greensboro T. C. Kerns, Durham.....	T. W. M. Long (1) I. H. Manning.....	1,700	7	309
89 1942	Charlotte.....	10	F. Webb Griffith.....	Donnel B. Cobb.....	Thos. DeL. Sparrow, Charlotte L. D. Carter, Gatesville.....	Roscoe D. McMillan.....	1,837	8	350
90 1943	Raleigh.....	736	Donnell B. Cobb.....	James W. Vernon.....	George S. Coleman, Raleigh Julian Moore, Asheville.....	Roscoe D. McMillan.....	1,919	8	361
91 1944	Pinehurst.....	60	James W. Vernon.....	Paul F. Whitaker.....	Fred C. Hubbard, North Wilkesboro George L. Carrington, Burlington.....	Roscoe D. McMillan.....	1,982	8	363
1945	No meeting because of O.D.T. restrictions		Paul F. Whitaker.....	Oren Moore.....	Wm. H. Smith, Goldsboro Zack D. Owens, Elizabeth City.....	Roscoe D. McMillan.....	1,811	7	383
92 1946	Pinehurst.....	789	Oren Moore.....		Wm. H. Smith, Goldsboro Zack D. Owens, Elizabeth City.....	Roscoe D. McMillan.....	1,939	6	397
93 1947	Virginia Beach, Va.....	44	Wm. M. Coppridge.....	Frank A. Sharpe.....	G. E. Bell, Wilson J. B. Bullitt, Chapel Hill.....	Roscoe D. McMillan.....	2,191	7	404
94 1948	Pinehurst.....	20	Frank A. Sharpe (2).....	James F. Robertson.....	V. K. Hart, Charlotte J. G. Raby, Tarboro.....	Roscoe D. McMillan.....	2,298	8	407
95 1949	Pinehurst.....	98	James F. Robertson.....	G. Westbrook Murphy.....	Joseph J. Combs, Raleigh Joseph A. Elliott, Charlotte.....	Roscoe D. McMillan.....	2,318	5	405
96 1950	Pinehurst.....	47	G. Westbrook Murphy.....	Roscoe D. McMillan.....	Ben F. Royal Joseph A. Elliott.....	Millard D. Hill.....	2,283	5	455
97 1951	Pinehurst.....	938	Roscoe D. McMillan.....	Frederic C. Hubbard.....	Joseph A. Elliott Henderson Irwin.....	Millard D. Hill.....	2,341	5	460
98 1952	Pinehurst.....	969	Frederic C. Hubbard.....	J. Street Brewer.....	Forest M. Houser Arthur Daughtridge.....	Millard D. Hill.....	2,326	5	476
99 1953	Pinehurst.....	1016	J. Street Brewer.....	Joseph A. Elliott.....	George W. Paschal John R. Bender.....	Millard D. Hill.....	2,673	5	480
100 1954	Pinehurst.....	1077	Joseph A. Elliott.....	Zack D. Owens.....	John F. Foster Julian A. Moore.....	Millard D. Hill.....	2,801	6	486
101 1955	Pinehurst.....	991	Zack D. Owens.....	J. P. Rousseau.....	George W. Paschal, Jr. Elias S. Faison.....	Millard D. Hill.....	2,896	6	507
102 1956	Pinehurst.....	1022	James P. Rousseau.....	Donald B. Koonce.....	E. W. Schoenheit Milton S. Clark.....	Millard D. Hill.....	3,058	7	56

†Died during his term of office; succeeded by E. J. Wood, first vice president.

‡Died during term of office.

(1) Died during term of office, succeeded by I. H. Manning.

(2) Died during term of office; succeeded by James F. Robertson, president-elect.

STATUS OF MEMBERSHIP BY COUNTIES—Continued

COUNTY	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Mitchell-Avery 13	6	5	5	8																							
Mitchell-Watauga 14	9	10	9	7	9	9	8	7	3	6	4	5	6	5	4	2	2	4	4	13	10	10	10	10	10	9	9
Nittany 15	17	21	21	18	22	21	19	22	21	20	19	17	22	21	21	20	22	23	26	26	28	28	29	33	35	34	34
Nash 16	33	37	35	25	35	39	34	36	32	39	37	38	43	44	45	40	49	55	62	53	56	63	65	68	69	73	
New Hanover	3	4	5	4	8	4	4	4	9	1	3	7	4	4	4	3	2	3	4	4	4	3	5	4	3	3	
Northampton	5	5	6	6	6	5	2	5	4	4	3	5	8	8	8	8	8	10	10	12	11	11	10	10	10	12	
Orange 17																											
Pasquotank	4	4	4	4	4	4	4	4	4	4	4	3	3	3	4	5	4	4	4	4	4	4	4	5	5	5	
Pasquotank-Camden-Currituck-Dare																											
Pasquotank-Camden-Dare 8	17	14	11	12	11	12	11	9		9	11	10	14	13	12	14	16	17	21	16	20	20	26	27	25	28	
Pearson	1	1	1	1	1	1	1	1	1																		
Pertuisans 18	6	6	6	7	7	8	7	7	8	8	9	8	8	9	8	6	6	6	6	6	8	7	9	9	9	10	
Pitt	27	27	20	14	22	26	24	26	26	29	28	25	29	30	31	32	30	31	32	29	31	31	28	34	40	46	
Polk	6	5	7	7	6	6	4	5	5	5	6	6	6	6	7	7	6	7	5	5	5	4	5	6	6	8	
Randolph	17	17	14	10	11	13	10	9	11	11	13	12	12	13	14	5	16	20	16	19	20	20	21	26	23	28	
Robeson	24	21	22	23	25	27	28	29	34	33	35	35	35	36	38	38	40	47	45	45	45	42	42	44	47	53	
Rockingham	53	39	33	24	34	30	27	28	26	24	27	26	24	29	29	25	29	29	30	31	30	30	30	32	37	45	
Rowan-Dare	22	21	21	19	20	21	23	22	22	23	24	22	22	23	22	22	22	24	25	24	21	21	25	25	28	36	
Rutherford	13	13	14	14	14	14	14	16	15	16	18	18	16	15	16	10	16	15	16	14	15	15	18	17	19	20	
Sampson	10	11	11	11	11	10	11	10	11	10	10	10	10	9	10	10	9	12	10	13	13	13	14	14	14	11	
Steady 15	16	15	13	12	16	17	18	19	18	20	16	17	20	20	17	16	18	21	26	26	22	22	24	25	26	29	
Steady-Montgomery	2	6	6	1	1	1																					
Stokes	20	13	17	12																							
Surry 19	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Surry-Yadkin	2	2	1	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Swain 10	13	10	9	10	10	11	10	8	11	13	13	14	15	14	14	3	13	14	14	14	15	15	16	17	15	16	
Transylvania	12	8	7	8	9	9	8	8	6	10	10	10	12	10	10	10	9	11	12	12	11	11	12	13	14	15	
Tyrrell 29	94	87	86	87	89	88	89	93	100	95	94	63	67	98	96	96	92	110	108	114	120	126	114	146	152	147	
Union	6	6	6	5	5	6	2	2	2	2	2	2	3	4	5	2	6	6	5	6	6	5	7	8	9	9	
Wayne	3	3	3																								
Washington-Tyrrell 11	38	30	32	22	27	29	27	29	30	31	34	33	35	38	38	37	37	38	38	37	37	37	38	41	37	39	
Watauga 22	10	11	10																								
Wayne	28	28	22	21	25	29	31	25	25	24	25	27	27	31	29	27	30	33	33	35	28	18	17	18	21	20	
Wilkes 2	4	1	1	5		4	1		4																		36
Wilkes-Alleghany																											
Wilson																											
Yadkin 19																											
Yancey																											
Totals	1,694	1,690	1,559	1,363	1,563	1,619	1,462	1,503	1,715	1,605	1,671	1,664	1,837	1,919	1,962	1,811	1,974	2,191	2,298	2,318	2,278	2,343	2,326	2,673	2,801	2,896	3,458

(1) See Fredell-Alexander. (2) See Wilkes-Alleghany. (3) See Watauga-Ashe and Ashe-Watauga. (4) See Mitchell-Avery. (5) See Pasquotank-Camden-Dare and Pasquotank-Camden-Currituck-Dare. (6) See Alamance-Caswell. (7) See Macon-Clay. (8) See Pasquotank-Camden-Currituck-Dare. (9) See Rowan-Dare. (10) See Jackson-Swain. (11) See Martin-Washington-Tyrrell. (12) See Mitchell-Avery. Mitchell-Watauga, and Mitchell-Yancey. (13) See Avery and Mitchell. (14) See Mitchell, Watauga-Ashe, and Ashe-Watauga. (15) See Stanly-Montgomery, Montgomery, and Stanly. (16) See Edgecombe-Nash. (17) See Durham-Orange. (18) See Chowan-Pertuisans. (19) See Surry-Yadkin. (20) See Washington-Tyrrell and Martin-Washington-Tyrrell. (21) See Mitchell-Watauga, Watauga-Ashe, and Ashe-Watauga. (22) See Ashe-Watauga.

ROSTER OF MEMBERS OF NORTH CAROLINA STATE BOARD OF HEALTH FROM ORGANIZATION IN 1877 TO 1956

Name	Address	Appointed by	Term
S. S. Satchwell, M.D., President	Rocky Point	State Society	1877 to 1878
Thomas F. Wood, M.D., Secretary	Wilmington	State Society	1877 to 1878
Joseph Graham, M.D.	Charlotte	State Society	1877 to 1878
Charles Duffy, Jr., M.D.	New Bern	State Society	1877 to 1878
Peter E. Hines, M.D.	Raleigh	State Society	1877 to 1878
George A. Foote, M.D.	Warrenton	State Society	1877 to 1878
S. S. Satchwell, M.D., President	Rocky Point	State Society	1878 to 1884
Thomas F. Wood, M.D., Secretary	Wilmington	State Society	1878 to 1884
Charles J. O'Hagan, M.D., President	Greenville	State Society	1878 to 1882
George A. Foote, M.D.	Warrenton	State Society	1878 to 1882
Marcellus Whitehead, M.D.	Salisbury	State Society	1878 to 1880
R. L. Payne, M.D.	Lexington	State Society	1878 to 1880
H. G. Woodfin, M.D.	Franklin	Gov. Z. B. Vance	1878 to 1880
A. R. Ledoux, Chemist	Chapel Hill	Gov. Z. B. Vance	1878 to 1880
William Cain, Civil Engineer	Charlotte	Gov. Z. B. Vance	1878 to 1880
R. L. Payne, M.D.	Lexington	State Society	1881 to 1887
M. Whitehead, M.D., President	Salisbury	State Society	1881 to 1884
S. H. Lyle, M.D.	Franklin	Gov. T. J. Jarvis	1881 to 1883
William Cain, Civil Engineer	Charlotte	Gov. T. J. Jarvis	1881 to 1883
W. G. Simmons, Chemist	Wake Forest	Gov. T. J. Jarvis	1881 to 1883
J. W. Jones, M.D., President	Wake Forest	State Society	1883 to 1889
John McDonald, M.D.	Washington	State Society	1883 to 1889
S. H. Lyle, M.D.	Franklin	Gov. T. J. Jarvis	1883 to 1885
W. G. Simmons, Chemist	Wake Forest	Gov. T. J. Jarvis	1883 to 1885
Arthur Winslow, Civil Engineer	Raleigh	Gov. T. J. Jarvis	1884 to 1886
R. H. Lewis, M.D.	Raleigh	State Board of Health	1884 to 1886
Thomas F. Wood, M.D., Secretary	Wilmington	State Society	1885 to 1887
William D. Hilliard, M.D.	Asheville	State Society	1885 to 1891
Arthur Winslow, Civil Engineer	Raleigh	Gov. A. M. Scales	1885 to 1891
W. G. Simmons, Chemist	Wake Forest	Gov. A. M. Scales	1885 to 1887
J. H. Tucker, M.D.	Henderson	Gov. A. M. Scales	1885 to 1887
R. H. Lewis, M.D., Secretary	Raleigh	State Society	1887 to 1888
H. T. Bahnson, M.D., President	Winston	State Society	1887 to 1888
Arthur Winslow, Civil Engineer	Raleigh	Gov. A. M. Scales	1887 to 1889
W. G. Simmons, Chemist	Wake Forest	Gov. A. M. Scales	1887 to 1889
J. H. Tucker, M.D.	Henderson	Gov. A. M. Scales	1888 to 1891
J. L. Ludlow, Civil Engineer	Winston	Gov. A. M. Scales	1888 to 1891
J. H. Tucker, M.D.	Henderson	Gov. D. G. Fowle	1888 to 1891
F. P. Venable, Ph.D., Chemist	Chapel Hill	Gov. D. G. Fowle	1889 to 1893
J. L. Ludlow, Civil Engineer	Winston	Gov. D. G. Fowle	1889 to 1892
J. A. Hodges, M.D.	Fayetteville	State Society	1889 to 1893
J. M. Baker, M.D.	Tarboro	State Society	1891 to 1893
J. H. Tucker, M.D.	Henderson	Gov. T. M. Holt	1891 to 1893
F. P. Venable, Ph.D., Chemist	Chapel Hill	Gov. T. M. Holt	1891 to 1892
J. L. Ludlow, Civil Engineer	Winston	Gov. T. M. Holt	1892 to 1897
Thomas F. Wood, M.D., Secretary†	Wilmington	State Society	1891 to 1895
George G. Thomas, M.D., President	Wilmington	State Board of Health	1892 to 1895
S. Westray Battle, M.D.	Asheville	State Society	1893 to 1895
W. H. Harrell, M.D.	Williamston	State Society	1893 to 1895
John Whitehead, M.D.	Salisbury	State Board of Health	1893 to 1895
W. H. G. Lucas	White Hall	Gov. Elias Carr	1893 to 1895
F. P. Venable, Ph.D., Chemist	Chapel Hill	Gov. Elias Carr	1893 to 1895
John C. Chase, Civil Engineer	Wilmington	Gov. Elias Carr	1894 to 1897
R. H. Lewis, M.D., Secretary	Raleigh	Gov. Elias Carr	1895 to 1897
W. P. Beall, M.D.	Greensboro	Gov. Elias Carr	1895 to 1897
W. J. Lumsden, M.D.	Elizabeth City	Gov. Elias Carr	1895 to 1897
John Whitehead, M.D.	Salisbury	State Society	1895 to 1897
W. H. Harrell, M.D.	Williamston	State Society	1895 to 1897
W. P. Beall, M.D.	Greensboro	Gov. Elias Carr	1895 to 1897
R. H. Lewis, M.D., Secretary	Raleigh	Gov. Elias Carr	1897 to 1899
F. P. Venable, Ph.D., Chemist	Chapel Hill	Gov. Elias Carr	1897 to 1899
John C. Chase, Civil Engineer	Wilmington	Gov. Elias Carr	1897 to 1899
Charles J. O'Hagan, M.D.	Greenville	Gov. D. L. Russell	1897 to 1899
John D. Spicer, M.D.	Goldsboro	Gov. D. L. Russell	1897 to 1899
J. L. Nicholson, M.D.	Richlands	Gov. D. L. Russell	1899 to 1901
R. H. Lewis, M.D., Secretary	Raleigh	Gov. D. L. Russell	1899 to 1901
A. W. Shaffer, Civil Engineer	Raleigh	Gov. D. L. Russell	1899 to 1901
Charles J. O'Hagan, M.D.	Greenville	Gov. D. L. Russell	1899 to 1901
J. L. Nicholson, M.D.	Richlands	Gov. D. L. Russell	1899 to 1901
Albert Anderson, M.D.	Wilson	Gov. D. L. Russell	1899 to 1901
George G. Thomas, M.D., President	Wilmington	State Society	1899 to 1901

† Died in 1892, leaving a five-year unexpired term, which was filled by the Board.

Name	Address	Appointed by	Term
S. Westray Battle, M.D.	Asheville	State Society	1899 to 1901
H. W. Lewis, M.D.	Jackson	State Society	1899 to 1901
H. H. Dodson, M.D.	Milton	State Society	1901 to 1907
R. H. Lewis, M.D., Secretary	Raleigh	Gov. C. B. Aycock	1901 to 1907
W. P. Ivey, M.D.	Lenoir	Gov. C. B. Aycock	1901 to 1907
George G. Thomas, M.D., President	Wilmington	Gov. C. B. Aycock	1901 to 1905
Francis Duffy, M.D.	New Bern	Gov. C. B. Aycock	1901 to 1905
J. L. Ludlow, Civil Engineer	Winston	Gov. C. B. Aycock	1901 to 1905
S. Westray Battle, M.D.	Asheville	State Society	1901 to 1907
H. W. Lewis, M.D.	Jackson	State Society	1901 to 1907
W. H. Whitehead, M.D.	Rocky Mount	State Society	1901 to 1905
J. L. Nicholson, M.D.	Richlands	State Society	1901 to 1905
J. L. Ludlow, Civil Engineer	Winston	Gov. C. B. Aycock	1903 to 1909
J. Howell Way, M.D.	Waynesville	Gov. R. B. Glenn	1905 to 1911
W. O. Spencer, M.D.	Winston	Gov. R. B. Glenn	1905 to 1911
George G. Thomas, M.D., President	Wilmington	State Society	1905 to 1911
Thomas E. Anderson, M.D.	Statesville	State Society	1907 to 1913
R. H. Lewis, M.D.	Raleigh	Gov. R. B. Glenn	1907 to 1913
E. C. Register, M.D.	Charlotte	Gov. R. B. Glenn	1907 to 1909
David T. Tayloe, M.D.	Washington	State Society	1907 to 1913
James A. Burroughs, M.D. ¹	Asheville	State Society	1909 to 1913
J. E. Ashcraft, M.D.	Monroe	State Board of Health	1909 to 1913
J. L. Ludlow, Civil Engineer	Winston-Salem	Gov. W. W. Kitchin	1911 to 1917
J. Howell Way, M.D., President	Waynesville	Gov. W. W. Kitchin	1911 to 1917
W. O. Spencer, M.D.	Winston-Salem	Gov. W. W. Kitchin	1911 to 1917
Thomas E. Anderson, M.D.	Statesville	State Society	1911 to 1917
Charles O'H. Laughinghouse, M.D.	Greenville	State Society	1913 to 1919
R. H. Lewis, M.D.	Raleigh	Gov. Locke Craig	1913 to 1919
Edw. J. Wood, M.D.	Wilmington	Gov. Locke Craig	1913 to 1915
A. A. Kent, M.D. ²	Lenoir	State Society	1913 to 1919
Cyrus Thompson, M.D.	Jacksonville	State Society	1913 to 1919
Fletcher R. Harris, M.D.	Henderson	State Board of Health	1915 to 1921
J. L. Ludlow, Civil Engineer	Winston-Salem	Gov. Locke Craig	1917 to 1923
J. Howell Way, M.D., President	Waynesville	Gov. T. W. Bickett	1917 to 1923
E. C. Register, M.D. ¹	Charlotte	Gov. T. W. Bickett	1917 to 1923
Thomas E. Anderson, M.D.	Statesville	State Society	1917 to 1923
Charles O'H. Laughinghouse, M.D.	Greenville	State Society	1919 to 1923
Fletcher R. Harris, M.D. ³	Henderson	State Society	1919 to 1923
A. J. Crowell, M.D.	Charlotte	Gov. T. W. Bickett	1921 to 1923
Chas. E. Waddell, C.E. ⁴	Asheville	Gov. C. Morrison	1919 to 1925
Cyrus Thompson, M.D.	Jacksonville	State Society	1919 to 1925
R. H. Lewis, M.D.	Raleigh	Gov. T. W. Bickett	1923 to 1925
E. J. Tucker, D.D.S.	Roxboro	Gov. T. W. Bickett	1923 to 1929
J. Howell Way, M.D., President	Waynesville	Gov. C. Morrison	1923 to 1929
A. J. Crowell, M.D.	Charlotte	Gov. C. Morrison	1923 to 1927
James P. Stowe, Ph.G.	Charlotte	Gov. C. Morrison	1923 to 1925
D. A. Stanton, M.D.	High Point	State Board of Health	1923 to 1929
Thomas E. Anderson, M.D.	Statesville	State Society	1923 to 1926
Charles O'H. Laughinghouse, M.D. ⁵	Greenville	State Society	1925 to 1931
Cyrus Thompson, M.D. ¹	Jacksonville	State Society	1925 to 1931
D. A. Stanton, M.D.	High Point	State Society	1925 to 1931
R. H. Lewis, M.D. ¹	Raleigh	Gov. A. W. McLean	1926 to 1931
Jno. B. Wright, M.D. ⁶	Raleigh	Gov. A. W. McLean	1925 to 1931
E. J. Tucker, D.D.S. ⁶	Roxboro	Gov. A. W. McLean	1926 to 1927
W. S. Rankin, M.D. ⁴	Charlotte	State Board of Health	1927 to 1929
L. E. McDaniel, M.D.	Jackson	State Board of Health	1927 to 1929
Chas C. Orr, M.D.	Asheville	Gov. A. W. McLean	1929 to 1935
Thomas E. Anderson, M.D. ⁶	Statesville	State Society	1929 to 1935
L. E. McDaniel, M.D. ⁶	Jackson	State Society	1927 to 1933
James P. Stowe, Ph.G. ⁶	Charlotte	Gov. A. W. McLean	1929 to 1935
A. J. Crowell, M.D. ⁶	Charlotte	Gov. O. Max Gardner	1930 to 1931
J. M. Parrott, M.D. ⁶	Kinston	State Board of Health	1929 to 1935
Chas. C. Orr, M.D. ⁶	Asheville	Gov. O. Max Gardner	1931 to 1935
J. M. Parrott, M.D. ⁵	Kinston	State Society	1931 to 1935
C. V. Reynolds, M.D.	Asheville	State Society	1931 to 1933
L. B. Evans, M.D.	Windsor	State Society	1931 to 1933
S. D. Craig, M.D.	Winston-Salem	State Society	1931 to 1933
John T. Burrus, M.D.	High Point	Gov. O. Max Gardner	1931 to 1933
J. N. Johnson, D.D.S.	Goldshoro	Gov. O. Max Gardner	1931 to 1933
J. A. Goode, Ph.G.	Asheville	Gov. O. Max Gardner	1931 to 1933
H. L. Large, M.D.	Rocky Mount	Gov. O. Max Gardner	1931 to 1935
H. G. Baity, C.E.	Chapel Hill	Gov. O. Max Gardner	1931 to 1935

¹ Died leaving unexpired term.² Resigned to become member of General Assembly.³ Resigned to become Health Officer Vance County.⁴ Resigned.⁵ Resigned to become Secretary of State Board of Health.⁶ Term terminated on account of the reorganization of the State Board of Health by General Assembly.

<i>Name</i>	<i>Address</i>	<i>Appointed by</i>	<i>Term</i>
Grady G. Dixon, M.D. ⁷	Ayden	Ex. Com. State Society	1931 to 1932
Grady G. Dixon, M.D. ⁷	Ayden	State Society	1932 to 1935
S. D. Craig, M.D.	Winston-Salem	State Society	1933 to 1937
W. T. Rainey, M.D.	Fayetteville	State Society	1933 to 1937
J. N. Johnson, D.D.S.	Goldsboro	Gov. J. C. B. Ehringhaus	1933 to 1937
Hubert B. Haywood, M.D.	Raleigh	Gov. J. C. B. Ehringhaus	1933 to 1937
James P. Stowe, Ph.G.	Charlotte	Gov. J. C. B. Ehringhaus	1933 to 1937
Grady G. Dixon, M.D.	Ayden	State Society	1935 to 1939
J. LaBruce Ward, M.D.	Asheville	State Society	1935 to 1939
H. Lee Large, M.D.	Rocky Mount	Gov. J. C. B. Ehringhaus	1935 to 1939
H. G. Baity, C.E.	Chapel Hill	Gov. J. C. B. Ehringhaus	1935 to 1939
J. N. Johnson, D.D.S.	Goldsboro	Gov. Clyde R. Hoey	1937 to 1941
Hubert B. Haywood, M.D.	Raleigh	Gov. Clyde R. Hoey	1937 to 1941
James P. Stowe, Ph.G.	Charlotte	Gov. Clyde R. Hoey	1937 to 1941
S. D. Craig, M.D.	Winston-Salem	State Society	1937 to 1941
W. T. Rainey, M.D.	Fayetteville	State Society	1937 to 1941
Grady G. Dixon, M.D.	Ayden	State Society	1939 to 1943
J. LaBruce Ward, M.D.	Asheville	State Society	1939 to 1943
H. Lee Large, M.D.	Rocky Mount	Gov. Clyde R. Hoey	1939 to 1943
H. G. Baity, Sc.D.	Chapel Hill	Gov. Clyde R. Hoey	1939 to 1943
C. C. Fordham, Jr., Ph.G. ⁸	Greensboro	Gov. Clyde R. Hoey	1940 to 1943
S. D. Craig, M.D.	Winston-Salem	State Society	1941 to 1945
W. T. Rainey, M.D.	Fayetteville	State Society	1941 to 1945
Hubert B. Haywood, M.D.	Raleigh	Gov. J. Melville Broughton	1941 to 1945
J. N. Johnson, D.D.S.	Goldsboro	Gov. J. Melville Broughton	1941 to 1945
James O. Nolan, M.D.	Kannapolis	Gov. J. Melville Broughton	1941 to 1945
Grady G. Dixon, M.D.	Ayden	State Society	1943 to 1947
J. LaBruce Ward, M.D.	Asheville	State Society	1943 to 1947
H. Lee Large, M.D.	Rocky Mount	Gov. J. Melville Broughton	1943 to 1947
Larry I. Moore, Jr.	Wilson	Gov. J. Melville Broughton	1943 to 1947
S. D. Craig, M.D., Pres.	Winston-Salem	State Society	1945 to 1949
W. T. Rainey, M.D.	Fayetteville	State Society	1945 to 1949
Hubert B. Haywood, M.D.	Raleigh	Gov. R. Gregg Cherry	1945 to 1949
James O. Nolan, M.D.	Kannapolis	Gov. R. Gregg Cherry	1945 to 1949
Paul Jones, D.D.S. ⁹	Farmville	Gov. R. Gregg Cherry	1946 to 1949
Jasper C. Jackson, Ph.G. ¹⁰	Lumberton	Gov. R. Gregg Cherry	1945 to 1947
Grady G. Dixon, M.D., Pres.	Ayden	State Society	1947 to 1951
H. Lee Large, M.D.	Rocky Mount	Gov. R. Gregg Cherry	1947 to 1951
J. LaBruce Ward, M.D.	Asheville	State Society	1947 to 1951
Hubert B. Haywood, M.D.	Raleigh	Gov. W. Kerr Scott	1949 to 1953
Mrs. James B. Hunt	Lucama	Gov. W. Kerr Scott	1949 to 1953
A. C. Current, D.D.S.	Gastonia	Gov. W. Kerr Scott	1949 to 1953
John R. Bender, M.D.	Winston-Salem	State Society	1949 to 1953
Benjamin J. Lawrence, M.D.	Raleigh	State Society	1949 to 1953
G. Grady Dixon, M.D.	Ayden	Medical Society	1951 to 1955
George Curtis Crump, M.D.	Asheville	Medical Society	1951 to 1955
John P. Henderson, Jr., M.D. ¹¹	Sneads Ferry	Gov. Wm. B. Umstead	1954 to 1955
H. C. Lutz, Phg.	Hickory	Gov. W. Kerr Scott	1951 to 1955
Hubert B. Haywood, M.D. ¹²	Raleigh	Gov. Wm. B. Umstead	1953 to 1957
Mrs. J. E. Latta	Hillsboro	Gov. Wm. B. Umstead	1953 to 1957
A. C. Current, D.D.S.	Gastonia	Gov. Wm. B. Umstead	1953 to 1957
John R. Bender, M.D.	Winston-Salem	Medical Society	1953 to 1957
Benjamin J. Lawrence, M.D.	Raleigh	Medical Society	1953 to 1957
G. Grady Dixon, M.D.	Ayden	Medical Society	1955 to 1959
George Curtis Crump, M.D. ¹²	Asheville	Medical Society	1955 to 1959
John P. Henderson, Jr., M.D.	Sneads Ferry	Gov. Luther H. Hodges	1955 to 1959
H. C. Lutz, Phg.	Hickory	Gov. Luther H. Hodges	1955 to 1959
Lenox D. Baker, M.D. ¹³	Durham	Gov. Luther H. Hodges	1956 to 1957

7 To fill vacancy caused by resignation of Dr. J. M. Parrott.

8 To fill vacancy caused by the death of James P. Stowe, Ph.G.

9 To fill vacancy caused by resignation of J. N. Johnson, D.D.S.

10 To fill vacancy caused by resignation of Larry I. Moore, Jr.

11 To fill vacancy caused by the death of Dr. H. Lee Large.

12 Resigned

13 To fill vacancy caused by resignation of Dr. Hubert B. Haywood.

ROSTER OF MEMBERS OF THE VARIOUS BOARDS OF MEDICAL EXAMINERS OF THE STATE OF NORTH CAROLINA

FIRST BOARD

James H. Dickson, Wilmington.....	1859-1866
Charles E. Johnson, Raleigh.....	1859-1866
Caieb Winslow, Hertford.....	1859-1866
Otis F. Manson, Townsville.....	1859-1866
William H. McKee, Raleigh.....	1859-1866
Christopher Happoldt, Morganton.....	1859-1866
J. Graham Tull, New Bern.....	1859-1866
Samuel T. Iredell, Secretary.....	1859-1866

SECOND BOARD

N. J. Pittman, Tarboro.....	1866-1872
E. Burke Haywood, Raleigh.....	1866-1872
R. H. Winborne, Edenton.....	1866-1872
S. S. Satchwell, Rocky Point.....	1866-1872
J. J. Summerell, Salisbury.....	1866-1872
R. B. Haywood, Raleigh.....	1866-1872
M. Whitehead, Salisbury.....	1866-1872
J. F. Shaffner, Salem.....	1866-1872
William Little, Secretary.....	1866-1872
Thomas F. Wood, Secretary, Wilmington.....	1867-1872

THIRD BOARD

Charles J. O'Hagan, Greenville.....	1872-1878
W. A. B. Norcom, Edenton.....	1872-1878
C. Tate Murphy, Clinton.....	1872-1878
George A. Foote, Warrenton.....	1872-1878
J. W. Jones, Tarboro.....	1872-1878
R. L. Payne, Lexington.....	1872-1878
Charles Duffy, Jr., Secretary, New Bern.....	1872-1878

FOURTH BOARD

Peter E. Hines, Raleigh.....	1878-1884
Thomas D. Haigh, Fayetteville.....	1878-1884
George L. Kirby, Goldsboro.....	1878-1884
Thomas F. Wood, Wilmington.....	1878-1884
Joseph Graham, Charlotte.....	1878-1884
Robert I. Hicks, Williamston ¹	1878-1880
Richard H. Lewis, Raleigh ²	1880-1884
Henry T. Bahnson, Secretary, Salem.....	1878-1884

FIFTH BOARD

William R. Wood, Scotland Neck.....	1884-1890
Augustus W. Knox, Raleigh.....	1884-1890
Francis Duffy, New Bern.....	1884-1890
Patrick L. Murphy, Morganton.....	1884-1890
Willis Alston, Littleton.....	1884-1890
J. A. Reagan, Weaverville.....	1884-1890
W. J. H. Bellamy, Secretary, Wilmington.....	1884-1890

SIXTH AND SEVENTH BOARDS³

R. L. Payne, Jr., Lexington.....	1890-1892
George W. Purefoy, Asheville.....	1890-1892
George G. Thomas, Wilmington.....	1890-1894
Robert S. Young, Concord.....	1890-1894
William H. Whitehead, Rocky Mount.....	1890-1896
George W. Long, Graham.....	1890-1896
L. J. Picot, Secretary, Littleton.....	1890-1896
Julian M. Baker, Tarboro.....	1892-1898
H. B. Weaver, Secretary, Asheville.....	1892-1898
J. M. Hays, Greensboro ⁴	1894-1897
Kemp P. Battle, Jr., Raleigh ⁵	1897-1900
Thomas S. Burbank, Wilmington ¹	1894-1898
Richard H. Whitehead, Chapel Hill ⁴	1896-1898
William H. H. Cobb, Goldsboro ⁶	1898-1900
J. Howell Way, Secretary, Waynesville ⁷	1898-1902
David T. Tayloe, Washington.....	1896-1902
Thomas E. Anderson, Sec., Statesville.....	1896-1902
Albert Anderson, Wilson ⁸	1898-1902
Edward C. Register, Charlotte ⁸	1898-1902
Thomas S. McMullan, Hertford ⁸	1900-1902
John C. Walton ⁸	1900-1902

EIGHTH BOARD

A. A. Kent, Lenoir.....	1902-1908
Charles O'H. Laughinghouse, Greenville.....	1902-1908
M. H. Fletcher, Asheville.....	1902-1908
James M. Parrott, Kinston.....	1902-1908
J. T. J. Battle, Greensboro.....	1902-1908
Frank H. Russell, Wilmington.....	1902-1908
George W. Pressly, Secretary, Charlotte ¹	1902-1906
G. T. Sikes, Secretary, Grissom ⁹	1906-1908

NINTH BOARD

Lewis B. McBrayer, Asheville.....	1908-1914
John C. Rodman, Washington.....	1908-1914
William W. McKenzie, Salisbury.....	1908-1914
Henry H. Dodson, Greensboro.....	1908-1914
John Bynum, Winston-Salem.....	1908-1914
J. L. Nicholson, Richlands.....	1908-1914
Eenj. K. Hays, Secretary, Oxford.....	1908-1914

TENTH BOARD

Isaac M. Taylor, Morganton.....	1914-1920
John Q. Myers, Charlotte.....	1914-1920
Jacob F. Highsmith, Fayetteville.....	1914-1920
Martin L. Stevens, Asheville.....	1914-1920
Charles T. Harper, Wilmington ⁴	1914-1915
Edwin G. Moore, Elm City ¹⁰	1915-1920
John G. Blount, Washington ¹¹	1914-1920
Hubert A. Royster, Secretary, Raleigh.....	1914-1920

ELEVENTH BOARD

Lester A. Crowell, Lincolnton.....	1920-1926
William P. Holt, Duke.....	1920-1926
J. Gerald Murphy, Wilmington.....	1920-1926
Lucius N. Glenn, Gastonia.....	1920-1926
Clarence A. Shore, Raleigh.....	1920-1926
William M. Jones, Greensboro.....	1920-1926
Kemp P. B. Bonner, Sec., Morehead City.....	1920-1926

TWELFTH BOARD

Paul H. Ringer, Asheville.....	1926-1932
W. Houston Moore, Wilmington.....	1926-1932
T. W. M. Long, Roanoke Rapids.....	1926-1932
W. W. Dawson, Grifton ⁴	1926-1930
J. K. Pepper, Winston-Salem.....	1926-1932
Foy Roberson, Durham.....	1926-1932
John W. McConnell, Secretary, Davidson.....	1926-1932
David T. Tayloe, Jr., Washington ¹²	1930-1932

THIRTEENTH BOARD

Ben F. Royal, Morehead City.....	1932-1938
Benj. J. Lawrence, Secretary, Raleigh.....	1932-1938
F. Webb Griffith, Asheville.....	1932-1938
Hamilton W. McKay, Charlotte.....	1932-1938
J. W. Vernon, Morganton.....	1932-1938
W. H. Smith, Goldsboro.....	1932-1938
K. G. Averitt, Cedar Creek ⁴	1932-1936
Roscoe D. McMillan, Red Springs ¹³	1936-1938

¹ Resigned before expiration of term.

² Elected for unexpired term of Dr. Hicks.

³ In 1890 the Medical Society of the State of North Carolina adopted the plan of electing members of the Board in such a manner that the terms would expire at different intervals of two years. This practice was followed for twelve years, or until 1902, when the plan was abandoned; an equivalent of two terms of six years each. It is evident that the Society arranged to abandon the policy as early as 1898, as two members were elected for short terms, and two years later two other members were elected for still shorter terms. It is therefore impossible to separate the sixth and seventh Boards, since the membership was overlapping.

⁴ Died before the expiration of his term.

⁵ Elected to serve unexpired term of Dr. Hays.

⁶ Elected to serve the unexpired term of Dr. Burbank.

⁷ Elected to serve the unexpired term of Dr. Whitehead.

⁸ Elected for short term expiring in 1902.

⁹ Elected to serve the unexpired term of Dr. Pressly.

¹⁰ Elected to serve the unexpired term of Dr. Harper.

¹¹ Died a few months before the expiration of his term; such a short time that the vacancy was not filled.

¹² Elected to serve unexpired term of Dr. W. W. Dawson.

¹³ Elected to serve unexpired term of Dr. Averitt.

FOURTEENTH BOARD

Karl B. Pace, Greenville.....	1938-1944
William M. Copridge, Durham.....	1938-1944
Frank A. Sharpe, Greensboro.....	1938-1944
Lewis W. Elias, Asheville ⁴	1938-1943
J. Street Brewer, Roseboro.....	1938-1944
W. D. James, Secretary, Hamlet.....	1938-1944
L. A. Crowell, Jr., Lincolnton.....	1938-1944
John LaBruce Ward, Asheville ¹⁴	1943-1944

FIFTEENTH BOARD

C. W. Armstrong, Salisbury.....	1944-1950
Paul G. Parker, Erwin.....	1944-1950
M. D. Bonner, Jamestown.....	1944-1950
T. Leslie Lee, Kinston.....	1944-1950
Roy B. McKnight, Charlotte.....	1944-1950
M. A. Pittman, Wilson.....	1944-1950
Ivan M. Procter, Secretary, Raleigh.....	1944-1950
James B. Bullitt, Chapel Hill ¹⁵	1949-1950
Paul F. Whitaker, Kinston ¹⁶	1950

SIXTEENTH BOARD

Amos N. Johnson, Garland.....	1950-1956
Heyward C. Thompson, Shelby.....	1950-1956
James P. Rousseau, Winston-Salem.....	1950-1956
Newsom P. Battle, Rocky Mount.....	1950-1956
Clyde R. Hedrick, Lenoir.....	1950-1956
L. Randolph Doffermire, Dunn.....	1950-1956
G. Westbrook Murphy, Asheville ¹⁷	1955
Joseph J. Combs, Secretary, Raleigh.....	1950-1956

SEVENTEENTH BOARD

Luther Randolph Doffermire, M.D., Dunn.....	1956-1962
Joseph John Combs, M.D., Raleigh.....	1956-1962
John Bascom Anderson, M.D., Asheville.....	1956-1962
Thomas Williams Baker, M.D., Charlotte.....	1956-1962
Edwin Albert Rasberry, Jr., M.D., Wilson.....	1956-1962
Thomas G. Thurston, M.D., Salisbury.....	1956-1962
Carl Vann Tyner, M.D., Leaksville.....	1956-1962

14 Elected to serve unexpired term of Dr. Elias.

15 Elected to serve unexpired term of Dr. T. Leslie Lee.

16 Elected to serve unexpired term of Dr. Paul G. Parker.

17 Elected to serve unexpired term of Dr. James P. Rousseau.

MEDICAL AWARDS

MOORE COUNTY MEDICAL SOCIETY MEDAL

In 1927 the Moore County Medical Society established a fund, the interest from which is used to pay for a medal to be given for the best paper read at the State Society meeting each year. No one is eligible to receive this medal except Fellows of the Medical Society of the State of North Carolina in good standing; no invited guest is allowed to compete.

Each Section Chairman selects a committee of three to decide on the best paper written in their section. The winning papers are then turned over to the State Committee, who select the one to receive the medal. The following Fellows have been awarded this medal:

1928—Paul Pressly McCain, M.D.....	Sanatorium
“The Diagnosis and Significance of Juvenile Tuberculosis”	
(From Section on Pediatrics)	
1929—A. B. Holmes, M.D.....	Fairmont
“The Treatment of Uremia”	
(From Section on Chemistry, Materia Medica and Therapeutics)	

1930—C. T. Smith, M.D., and W. Bernard Kinlaw, M.D.....	Rocky Mount
“The Clinical Consideration of Anaemia of Pregnancy and of Puerperium”	
(From Section on Practice of Medicine)	

1931—F. C. Smith, M.D.....	Charlotte
“Practical Value of Perimetry in Intracranial Conditions; Case Reports” (tumors, vascular disease, toxemia, syphilis and trauma)	
(From Section on Eye, Ear, Nose and Throat)	

1932—Charles I. Allen, M.D.....	Wadesboro
“An Improved Splint for Treating Fractures of the Lower Extremity Showing Reduction and Skeletal Distraction Attachments”	
(From Section on Surgery)	

1933—H. L. Sloan, M.D.....	Charlotte
“Some General Remarks about Cataract Surgery, With Report of 100 Consecutive Uncomplicated Cataract Operations”	
(From Section on Ophthalmology and Otolaryngology)	

J. R. Adams, M.D.....	Charlotte
“Hypo-glycaemia in Children”	
(From Section on Pediatrics)	

1934—Fred E. Motley, M.D.....	Charlotte
“Complications of Mastoiditis with Special Reference to Septicemia”	
(From Section on Ophthalmology and Otolaryngology)	

1935—Arthur H. London, M.D.....	Durham
“The Composition of an Average Pediatrics Practice”	
(From Section on Pediatrics)	

1936—V. K. Hart, M.D.....	Charlotte
“Etiological and Therapeutic Aspects of Bronchiectasis with Clinical Observations on Bronchial Lavage by the Stitt Method”	
(From Section on Ophthalmology and Otolaryngology)	

1937—No award made.

1938—O. Hunter Jones, M.D.....	Charlotte
“Pelvic Architecture and Classification with its Practical Application”	
(From Section on Gynecology and Obstetrics)	

1939—Donnell B. Cobb, M.D.....	Goldsboro
“Vaginal Ureterolithotomy”	
(From Section on Surgery)	

1940—C. R. Monroe, M.D., C. D. Thomas, M.D., and C. L. Gray, M.D.....	Pinehurst
“Thoracoplasty and Apicolysis”	
(From Section on Surgery)	

1941—Walter R. Johnson, M.D.....	Asheville
“Is Diverticulitis of the Colon a Surgical Disease?”	
(From Section on Practice of Medicine)	

1942—E. P. Alyea, M.D.....	Durham
“Castration for Carcinoma of the Prostate Gland”	
(From Section on Surgery)	

1943—No award made.

1944—D. F. Milam, M.D.....	Chapel Hill
“Vitamin C Content of Some North Carolina Cooked Foods”	
(From Section on Public Health and Education)	

- 1945—No Meeting.
- 1946—E. C. Hamblen, M.D.Durham
 "Some Aspects of Sex Endocrinology in General Practice"
 (From Section on General Practice of Medicine and Surgery)
- 1947—W. L. Thomas, M.D.Durham
 "Some psychosomatic Problems in Gynecology"
 (From Section on Gynecology and Obstetrics)
- 1948—Felda Hightower, M.D.Winston-Salem
 "The Control of Electrolyte and Water Balance in Surgical Patients"
 (From Section on Surgery)
- 1949—George J. Baylin, M.D.Durham
 "The Roentgen Aspect of Non-Opaque Pulmonary Foreign Bodies"
 (From Section on Radiology)
- 1950—Parker R. Beamer, M.D.Winston-Salem
 "Studies on Experimental Leptospirosis"
 (From Section on Pathology)
- 1951—John P. U. McLeod, M.D.Marshville
 "A Simplified Modification for Staining of the Vaginal Smear for Immediate Appraisal of Endocrine Activity"
 (From Section on Gynecology and Obstetrics)
- 1952—Samuel F. Ravenel, M.D.Greensboro
 "Humidification in Pediatrics"
 (From Section on Pediatrics)
- 1953—Harrie R. Chamberlin, M.D.Chapel Hill
 "Diagnosis and Management of Poisoning Due to Organic Phosphate Insecticides"
 (From Section on Pediatrics)
- 1954—Paul Kimmelstiel, M.D.Charlotte
 Roland T. Pixley, M.D.Charlotte
 John Crawford, M.D.Charlotte
 "Statistical Review of Twenty-two Thousand Cases Examined by Cervical Smears"
 (From Section on Pathology)
- 1955—H. Hugh Bryan, M.D.Chapel Hill
 "Obesity and the Public Health"
 (From Section Public Health)

THE GEORGE MARION COOPER AWARD

The Fellows of the Wake County Medical Society present..... this George Marion Cooper Award established in honor of George Marion Cooper, physician and health benefactor.

This medal is awarded by the Fellows of the Wake County Medical Society as a token of appreciation and esteem in recognition of the eminence of an essay contributing to the knowledge and advancement of the science of medicine in the field of Preventive Medicine, Public Health, or Maternal and Infant Health Care, presented before the Medical Society of the State of North Carolina. The following Fellows have been awarded this medal:

- 1951—Donald L. Whitener, M.D.Winston-Salem
 "The Management of Labor and Delivery in the Interest of the Premature Infant"
 (From Section on Gynecology and Obstetrics)
- 1952—Ronald Stephen, M.D., Senior Author;
 Duke University.Durham
 "The Evaluation of Methods of Pain Relief During Labor and Delivery with Reference to Mother and Child."
 (From Section on Gynecology and Obstetrics)
- 1953—Ernest Craige, M.D.Chapel Hill
 "The Prevention of Recurrences of Rheumatic Fever"
 (From the Section on Practice of Medicine)
- 1954—Richard L. Pearse, M.D.Durham
 Eleanor Easley, M.D.Durham
 Kenneth Podger, M.D.Durham
 "Obstetric Analgesia and Anesthesia"
 (From Section on Obstetrics and Gynecology)
- 1955—Dirk Verhoeff, M.D.Huntersville
 William M. Peck, M.D.McCain
 "The Trends in Management of Tuberculosis in Children"
 (From Section on Pediatrics)

GASTON COUNTY MEDICAL SOCIETY AWARD

By authority of the House of Delegates an award is established by the Gaston County Medical Society for the best presentation of audio-visual material in scientific treatise and will be awarded to the best presentation annually at the Annual Session of the State Society. Competition will be restricted to audio-visual material as provided by the rules. Program Chairmen of the eleven scientific sections should take note of this in the preparation of the 1956 program and in judging of presentations at the Annual Session in 1956. The following Fellows have been awarded this medal:

- 1952—Kenneth L. Pickrell, M.D.Durham
 "Tattooing the Cornea"
 (From Scientific Exhibits)
- 1953—Joseph E. Markee, M.D.Durham
 "Autonomic Nervous System"
 (Film from Audio-Visual Postgraduate Instructional Program)
- 1954—William H. Boyce, M.D.Winston-Salem
 Fred K. Garvey, M.D.Winston-Salem
 Charles M. Norfleet, M.D.Winston-Salem
 "Biocolloids of Urine in Health and in Calculous Disease"
 (From Scientific Exhibits)
- 1955—Caleb Young, M.D.Winston-Salem
 "Congenital Dislocation of the Hip"
 (A motion picture)
 (From Postgraduate Audio-Visual Program)

EXECUTIVE COUNCIL MEETINGS

EXECUTIVE COUNCIL MEETING

Sunday Morning, April 29, 1956

The Executive Council met at 10:00 o'clock A.M. April 29, 1956 at the Carolina Hotel, Pinehurst, North Carolina, presided over by Dr. James P. Rousseau, president, of Winston-Salem. Invocations were pronounced by Dr. G. W. Murphy. Secretary. M. D. Hill called the roll of those present as follows:

Officers:

President—Dr. James P. Rousseau
President-Elect—Dr. Donald B. Koonce
First Vice President—Dr. Edward W. Schoenheit
Second Vice President—Dr. Milton S. Clark
Secretary-Treasurer—Dr. Millard D. Hill
Executive Secretary—Mr. James T. Barnes

Councilors:

First District—Dr. T. P. Brinn
Second District—Dr. Frederick P. Brooks
Third District—Dr. Dewey H. Bridger
Fourth District—Dr. Henderson Irwin
Fifth District—Dr. Ralph B. Garrison
Sixth District—Dr. George W. Paschal, Jr.
Seventh District—Dr. Leslie M. Morris
Eighth District—Absent
Ninth District—Dr. John C. Reece
Tenth District—Dr. William A. Sams
Speaker of the House of Delegates:
Dr. G. Westbrook Murphy
Vice Speaker of House of Delegates:
Dr. Lenox D. Baker
Past President—
Dr. Zack Owens

Others present:

Dr. Joseph J. Combs, North Carolina Board of Medical Examiners
Dr. Wingate M. Johnson, Editor, North Carolina Medical Journal
Dr. J. W. R. Norton, North Carolina Board of Health
Mr. John Anderson, Attorney

A quorum was declared. Vice Councilor of the Fourth District, Dr. Ernest L. Strickland, and attorney John H. Anderson were recognized.

President Rousseau referred to the tendered resignation of Executive Secretary, James T. Barnes, and to the polled permission of the Council to defer action on the resignation pending meeting of the Council for a final action. He further referred to Mr. Barnes' reasons as to lack of clarification of his duties and responsibilities in the Society's headquarters office.

Dr. Donald B. Koonce offered the following motion: First, that the Executive Secretary be given the right to hire and fire all executive personnel with the exception of the two executive officers besides himself, the Assistant Executive Secretary in charge of Public Relations and Mrs. Boutwell, Health Education Consultant; that a budget be set aside for executive purposes whereby he has the right (this is my second motion) to sign checks for Executive Office expense and salaries; and my third motion, which will have to go before the House of Delegates according to the new Constitution and the old Constitution (the other two don't) is that in order to show him our confidence in him and renew our faith in him and insist that he stay with us, that we ask the House of Delegates to reappoint him for three years as of this meeting.

Dr. Sams: I would like to second all three motions wholeheartedly.

President Rousseau: Apparently there is no discussion. I will put the question.

[The motion was put to a vote and carried unanimously.]

On motion of Dr. Koonce, seconded by Dr. Sams, it was established that the budget for the Executive Office expense and salaries be set up by the Constitutional Secretary and Treasurer and the Finance Committee. Upon being put the motion carried unanimously.

On motion duly made, seconded and carried, the Vice Councilor of the Second District, Dr. F. M. S. Patterson, resignation was accepted.

On motion of Dr. Henderson Irwin the Ashe-Watauga Counties Medical Society was authorized to dissolve on condition that each of these counties organize their own medical society. Motion was seconded by Dr. Milton Clark and upon being put to vote carried.

On motion, duly seconded and carried, the Council declined as impractical of administration the return of paid dues in the instance of death of a member of the Society.

On motion duly made, seconded and carried, a resolution of information on legal procedures related to adoption of children in the state and the referral of such children for such adoption procedures as required by law was endorsed for information to county medical societies.

On motion made, seconded and carried, the Lee County Medical Society resolution related to alcohol blood test for operators of motor vehicles charged with being under the influence of alcoholic beverages was accepted as information.

On motion of Dr. Sams, seconded by Dr. Irwin, and carried, the common carrier fare and fifteen dollars per day maintenance was authorized each year for one president-delegate of each of the three Student AMA Chapters at the medical schools of North Carolina to attend the national convention of Student AMA as well as to authorize such president-delegate of each Chapter to attend as ex-officio members of the House of Delegates of the Medical Society of the State of North Carolina.

Dr. Rainey Stanford, chairman, Committee on Voluntary Prepayment Programs of Health Services presented a discussion of the Committee study for the year and read the following written summary of his report:

North Carolina pays less than most states for the medical care of its indigent patients. In fact, it has done very little for them. The counties have been much more liberal. For the current fiscal year the 100 county boards of commissioners have appropriated just over 2½ million dollars for medical care and hospitalization of people who fall in the various categories of indigency.

I would like to say here I was talking with someone about this plan, and he said, "I don't believe the state will ever do it. They can't afford it." Well, it isn't a question of anybody affording it. It is being paid, but it is being paid by the wrong people. It is being lost by the hospital and paid by the paying patients in the hospital. They are the ones that are paying these bills.

It seems to your committee that the remainder of this poor patient's bill is more the obligation of the state and county than it is that of the hospital and the hospital patient now absorbing the balance, and we feel that the legislators will see and understand this if it is

properly presented to them. We think that our Legislative Committee should present this appeal to every interested agency in North Carolina and get these agencies to participate in the program of informing the legislators.

It means that if this thing is to be put across we have to bring enough explanation and enough common sense and pressure to get the legislators to really see that we have built all these hospitals and if we are going to keep them from going bankrupt we will have to do something about it.

It is the feeling of our committee that this is the one thing that has not been done for the North Carolina Medical Plan. We have built the buildings, we have done all these things, and now we must put it on a good, solid financial foundation.

Finally, if the state, together with the counties, decides to undertake this program, the pooled fund which the Welfare Department is advocating would be complete and would pay the full per diem cost for the members of the completely indigent group.

This group would be helped just as the others. This pool fund group is very popular in the state, and they hope to pay \$10 on their bill next year, but if we were to complete this plan the full bill would be paid.

There is one advantage that should be mentioned right here: For every dollar that the state and county puts into this pooled fund, the Federal Government will put in a dollar. In the final analysis, the balance of this patient's bill, after the now existing agencies have paid their quota, would be paid half by the Federal Government and half by the state and county.

That is one advantage in doing this thing, that is, the Federal Government will match every dollar that is put up by the state and county.

There were approximately 287,383 indigent patient days in North Carolina in one year. In giving us these figures the Welfare Department gave us their two groups for one year each, but not for the same year. From July 1, 1954 through June 30, 1955, there were 81,245 patient days for the care of recipients of public assistance. For the calendar year 1954, there were 206,138 days of care for the certified medically indigent. So as said above, the total of these two groups over the year period for each group is 287,383 patient days. These figures will help us determine how much money the state and counties will need to furnish for these indigent groups. Some of these patients belong to the Welfare Department's medically indigent group and allowance should be made for this. As far as the medically indigent group No. 2 is concerned, it represents virgin territory and is something that will have to be explored by the proper authorities, because we do not at present know the number of these people.

That is the group that is able to pay part of the cost of medical care, and I would like to say something that is not in this report. We have suggested that the doctors of the state give their service to the indigent group, the two groups that are listed by the Welfare Department, the so-called indigent and medically indigent. The reason for using these terms is that the second group, which are medically indigent, are just indigent as far as medicine is concerned, but they are able to take care of most other things. We are suggesting that the doctors continue to do that. I think most of the doctors of North Carolina have been doing that for years, but we are recommending that for the

medically indigent group No. 2, which is the group not on the Welfare list, if the state decides to do anything about it, that the doctors should render this group a bill made out recognizing the salary of the patient, financial position, worked out between him and the patient. We had thought at one time of recommending that we make a regular salary payment scale for that patient, and that that might be the proper thing to do, but that would be left to the House of Delegates Committee. It has been the idea and thought of this committee that it is perfectly all right to subsidize the hospital, but that we ought not to subsidize the doctor in any way, shape or form.

President Rousseau: Thank you. I take it that you are simply asking that the Council authorize our Legislative Committee to go with other agencies to the State Legislature to see if they will appropriate funds to pay the difference between what the pool fund pays and the loss which the hospital incurs in taking care of these patients.

On motion of Dr. Irwin, seconded by Dr. Koonce and carried unanimously, the Council accepted the report of the Committee.

On motion of Dr. Clark, seconded by Dr. Sams, the Report of the North Carolina Board of Medical Examiners containing recommendation of an annual physician registration law and recommendation of an election procedure for a staggered membership on the Board of Medical Examiners was accepted by unanimous vote of the Council.

Dr. T. S. Raiford presented a report of the Committee Liaison to the North Carolina Bar Association as to joint work on medico-legal interprofessional code of relations as follows:

We became interested in this about a year ago, and Dr. Rousseau fortunately was interested in it and got it before the Bar Association last year in Asheville and got their okay on it, and he appointed this committee to try to formulate a code.

It should be emphasized that this is in no way legislation. This is a gentleman's agreement, and as such, based on the experience of the other groups which I have mentioned, it has proved very helpful to everyone concerned.

Two committees were formed, one from the Medical Society comprised of six members, and one from the North Carolina Bar Association, likewise comprised of six members.

Mr. Walton, of Asheville, who is a very good friend of mine, was the chairman of the legal committee. During the winter months he worked on this, and the code was formulated, sometimes by telephone, sometimes by sessions. We tried to formulate a code based on the best parts of the other codes which have been adopted. The Cincinnati Code, the original code, is probably the most succinct, concise and effective. The last one, that of Wisconsin, is perhaps the most comprehensive, but it is a little difficult to understand.

As I said, we tried to get the best of each code that had been proposed so far, and I had the opportunity of going over this with attorney George Hall, AMA Legal Department, in Chicago in February, and he thought we had some very good points. I think, although he didn't say so, that his intention is to gradually put this at a national level.

As to the Inter-professional Code, there are two things that always seem to rub both doctors and lawyers the wrong way. One is the lack of preparedness, or lack of announcement, before the actual case comes to trial, whereby the doctor is inconvenienced and is subpoenaed at odd moments. The other is adequate compensation.

I think we have covered the point of the lack of adequate preparation in the fact that a pre-trial conference between lawyer and doctor is necessitated before any subpoena is issued. The subpoena is an objectionable thing at times to a lot of doctors, but we realize that that is necessary because it provides for a physician testifying without his testimony being voluntary. In other words he cannot be accused of being a voluntary or biased witness. It also allows the lawyer to continue his case if for any reason the doctor is not able to be there that specific time, whereas without subpoena it could not be done.

The second matter, that of adequate compensation for medical services in connection with litigation, has been a little more difficult.

We have divided that, as you will see, into the medical services which are administered before trial, that is, the examinations of the courts and the lawyers, should be at a specified fee, just as any other professional services. The matter of compensation for testimony in court is a different problem because it is quite a difficult one. At best, lawyers get paid a very minimal sum for testimony, and if the case is lost, they get paid nothing. Doctors cannot accept a case on a contingency basis, whereas lawyers can. However, on the medical side of it we have to charge professional fees according to the time and effort we spend. If the case is won, we get paid; if it is not, we don't. I don't see any solution for that. Maybe it is something that will be worked out in the future.

On the 30th of March and the 31st, the two committees met first separately, and then jointly, and it was most gratifying to find that the lawyers went right down the line with medical men all the way through, and there were very few points of disagreement. We realize that this does not cover everything, but I think it offers us a very excellent start toward harmonious relations with the legal profession. As a result of this, we have made the following recommendations which you will see on the first page:

(1) That the proposed Inter-professional Code be adopted by each Society as a guide for medico-legal procedures.

(2) That the Code be printed in pamphlet form and distributed to all members of the North Carolina State Medical Society and the North Carolina Bar Association.

(3) It is further recommended that this joint or a similar committee be permanently continued to deal with medico-legal problems if and when they arise in the future.

To these three recommendations I have added a fourth one which applies only to the medical societies because I understand that the mechanics of the State Bar organization is not like the Medical Society and that they cannot institute at the county level. Our fourth recommendation which we would like accepted by this body is:

(4) That the Code be referred to the county medical societies to be put into action at that level with such modifications as may be necessary for that particular locale.

This is just opening the door. One of the next things we have to do is to formulate some type of instruction to younger doctors coming along as to how to conduct themselves in court, what their privileges and what their obligations are. We in some of the counties have instituted an orientation course in medico-legal procedure. I know it is true in Mecklenburg, and it is an admirable thing,

and I hope later on we can add such things to this as needed.

Dr. Murphy: I will say first that I am familiar with this, and I think this is one of the finest pieces of work that I have ever seen done in the Medical Society. Dr. Raiford, being very modest, didn't say he made a trip to New York and another one to Chicago on this. I would like to make a motion that the Executive Council recommend to the House of Delegates that it be adopted as a policy of the Medical Society of the State of North Carolina, and that, having been adopted by the Bar Association, it become operative and that the recommendations become effective.

[The motion was seconded by Dr. Koonce.]

President Rousseau: Is there discussion?

[The motion was put to a vote and carried unanimously.]

Dr. J. Street Brewer, chairman of the Committee to Study the Integration of Negro Physicians into the Medical Society, made the following report:

A meeting of the Committee to Integrate Negro Physicians into the Medical Society of the State of North Carolina was held in Kinston on Sunday, February 26, 1956. The Committee, consisting of Dr. J. Street Brewer, Dr. Ben Royal and Dr. Paul F. Whitaker, were all present. Dr. Brewer, as Chairman of the Committee, presided.

The Committee reviewed in general the action taken by the House of Delegates at its May 1955 meeting in Pinehurst to admit qualified Negro physicians to the scientific and business sessions of the Society. Dr. Brewer reported on the efforts being made to find a place of meeting for the Society in the future. It was the feeling of the Committee that Asheville could perhaps offer the best over-all accommodations in the immediate future. Of course, this Committee will be guided by and abide by the decision of the committee dealing with this specific matter.

As far as the Committee knows, no Negroes have yet applied for membership in the various county societies of the state.

The Committee recommends that the dues for any Negro physician that may apply be set at \$20 per year—\$15 of which would be for public relations and \$5 for operation of the State Office of the Medical Society of the State of North Carolina. This was agreed upon unanimously by the Committee.

Our dues, I believe, are \$40, \$15 going to public relations and \$25 to the general operation of the state office.

The Committee also recommends that the various composite county societies of the Medical Society of the State of North Carolina fix their own dues for Negro physicians who might apply for membership in the light of careful consideration of local conditions pertaining. They feel that this is a county responsibility and also recommend that record of application for membership by Negro physicians be immediately forwarded to the central office of the Society.

As the members of the Society well know, the officers and Council of the Medical Society of the State of North Carolina, by reason of the difficulty of finding a meeting place which would accommodate Negro physicians as business and scientific members, requested that the various county societies admit no Negro physicians to membership until after the 1956 meeting in Pinehurst.

In the light of this action, the Committee and the Society have of course had no experience in the admission of Negro physicians, and the results of the action taken by the House of Delegates in admitting them to scientific and business membership, cannot yet be determined. Until such experience and results can be ascertained and evaluated, it was the unanimous opinion of the Committee, after careful consideration of the resolution presented by Dr. Ben J. Lawrence to the House of Delegates, and passed by the House of Delegates at its final session of the 1955 meeting, that on the basis of the facts in hand at the present time, that it would not be in the best interests of the Medical Society of the State of North Carolina to undertake at this time the organization of an additional group within the Society or associated with the Society as that resolution proposes to do.

Getting specifically to our relationship with Negro physicians, you have the action of the House of Delegates and our recommendation of last year. You know the problem, and your Committee is working with it and leave it to the good judgment of this Executive Council and the House of Delegates as to when we actually go into the implementation of this recommendation. I thank you!

On motion of Dr. Garrison to accept the report, discussion ensued as to the status of the 1955 House of Delegates action on a similar report of this Committee:

Dr. Brooks: The action which the county societies have taken this year has simply been on a voluntary basis. It is just that they have agreed to go along with what the Executive Committee requested them to do.

That is just a gentleman's agreement.

So the status is that of the last day of your House of Delegates in this room last year.

Mr. Barnes: As you completed your sessions here last year, it was your information that only the By-Laws had to be changed to effect this "scientific membership." It was discovered after we left Pinehurst that that information was not correct, that membership is described in an article of the Constitution, and therefore any action of last year had to lie over for a year to be legal. So we have to ratify what we did last year to make it legal as a change in the section of the Constitution involves membership.

Dr. Koonce: That answers it. If the House of Delegates ratifies it at this meeting I think it should be implemented. If it is not ratified we don't have any argument.

The motion being seconded by Dr. Clark was put to vote and carried.

Report of the Anesthesia Study Committee was presented by Dr. David A. Davis of Chapel Hill (see House of Delegates transactions) and on motion, duly seconded and carried, was accepted.

Dr. Samuel L. Elfmon, chairman, Committee on Veterans Affairs made the following report:

The functions of this committee have been divided as follows: Home Town Medical Care program for service-connected veterans; the Veterans Administration Hospital and Clinics—to improve relations between home-town doctor and disabled veteran and Veterans Administration physicians; legislation and education in regard to veteran affairs—to coordinate and promote such efforts by the AMA; and to assist the North Carolina Liaison Committee on Veterans Affairs.

During the past year we have been primarily occupied with nurturing and improving the Home Town Care Program. Each month 600 or more practicing physicians treat service-connected disabled veterans in their home towns. During the past year nearly 2000 individual practicing physicians participated. The average physician treats three veterans during the year. There are nearly 2900 members in the North Carolina Medical Society; of these about 300 do not treat private patients, and another 300 or 400 limit their practices to pediatrics and obstetrics and therefore are not eligible for this program. We are justly proud of the fact that almost every eligible physician participates in the Home Town Care Program. We believe the availability of such a high percentage of physicians to treat service-connected veterans speaks well for our organization of the Home Town Care Program and free choice of physicians by disabled veterans. This has been true with the old fee schedule as well as with the new fee schedule recently inaugurated.

Why such a well-functioning organization is under attack by the Veterans Administration is not easy to understand. The Veterans Administration invited the North Carolina State Medical Society and the North Carolina American Legion to organize the Home Town Care Program in North Carolina in 1946. The Hospital Savings Association was invited to set up the administrative machinery. These three organizations have nurtured this program and made it the well-functioning organization which it is today.

Since about 1952, the Veterans Administration, under Chief Medical Director Admiral Boone, and since 1955, under Dr. W. S. Middleton, has repeatedly advised and ordered us to discontinue the intermediary—namely, the Hospital Savings Association.

Due to the persistent urging by the Veterans Administration this committee, in January, 1955, recommended to the Executive Council that the "intermediary" be terminated, even though the program had been entirely satisfactory to the Medical Society, Veterans Organizations and obviously to the participating physicians and the sick veterans. Subsequent to the adoption of this recommendation by the Executive Council, Mr. Barnes and Dr. Owens (then President of the Society) received other advice which indicated the advisability of maintaining the present program until the forthcoming changes in the Veterans Administration had materialized. This obviously referred to the assumption of duties as Chief Medical Director by Dr. W. S. Middleton.

It appears that Dr. Middleton did not visit the grass root communities before writing the letter of October 24, 1955. In this letter addressed to the presidents of eight State Medical Societies still utilizing an intermediary, he advised that the intermediary be discontinued before July, 1957. The reasons for this request were based on economy, duplication of effort, and failure to fully utilize existing V.A. facilities. No data to support these assumptions have been made available.

A meeting was held in Chicago on January 9, 1956 with representatives from eight states involved, namely, California, Michigan, Colorado, Oregon, Washington, Wisconsin, North Carolina and Hawaii. Physicians, service organizations and intermediaries were represented, and it was generally agreed that Dr. Middleton had

not been properly informed and that his statements are without factual data to substantiate them. It was concluded to request a meeting with Dr. Middleton and the representatives of the other interested parties; namely, the physicians, service organizations and intermediaries to further discuss this problem.

The economy factor which Dr. Middleton stressed consists of \$28,000 per year for the intermediary in North Carolina and \$350,000 per year for the eight states. The 1956 Veterans Administration medical budget of \$790 million provides 1 per cent for payment to physicians on a fee basis and 8 per cent or \$66 million for the operation of 99 Veterans Administration Clinics. Approximately 1/3 of the fees paid under the Home Town Care Program have been paid to physicians for compensation evaluation examinations, without frequent unfavorable repercussions, due to the integrity of the home town physicians. These examinations are a legitimate function of Veterans Administration Clinics and probably should be totally divorced from the Home Town Care Program.

The utilization of available Veterans Administration facilities has a variety of implications. If the government expands the use of these facilities for more outpatient care, it will mean more veterans losing the opportunity of free choice of physician, losing time from work and losing the convenience of seeing his home town doctor when his medical needs are urgent as well as the value to be gained in personal patient-physician relationship.

The duplication of effort refers to the duties of the intermediary and the Veterans Administration regional office in issuing authorizations, payments, et cetera. This we understand is duplication. But even if some duplication does exist, the intermediary is essential to nurture patient-physician and Veterans Administration relationship.

It has been the understanding of this committee and the physicians of North Carolina that the contract between the Veterans Administration, the Hospital Saving Association of Chapel Hill, North Carolina, and the North Carolina Medical Society originally entered into in 1946 and renewed annually ever since was intended to enable the veteran to obtain outpatient medical care for service-connected disabilities in his own community with free choice of physicians.

Because we think we are right in this concept, the Committee has voted to propose the following resolution for adoption.

Whereas, The Committee believes that veterans with service-connected disabilities will receive the best medical care available by North Carolina physicians through continued use of the Intermediary Plan and

Whereas, The Veterans Administration has not shown by comparable cost figures that there would be any saving by cancellation of the Intermediary Plan,

This Committee recommends a RESOLUTION that the Intermediary contract administered by Hospital Saving Association (The Blue Shield Plan) and sponsored by the Medical Society of the State of North Carolina, be continued without interruption.

If this RESOLUTION is accepted by the Executive Council of the Medical Society of the State of North Carolina:

This Committee recommends that the President of the State Medical Society request a meeting, along with personnel representing other

intermediary states, with Dr. Middleton, Chief Medical Director of the Veterans Administration.

That the President point out to the AMA Council on Medical Services the advantages of the Intermediary Plan to the 40 non-intermediary states,

That copies of the RESOLUTION be distributed to all North Carolina Congressmen,

That the Committee support a similar Blue Shield Intermediary Plan for the medical care of the dependents of military service personnel who may be legally entitled to medical care under a program offering free choice of physician and fee for service payment.

On motion duly made, and seconded, the report and the resolution contained therein were adopted.

On motion of Dr. Milton Clark, seconded by Dr. Schoenheit, the recommendation to revise the title of the Section on Practice of Medicine to the new title Section on Internal Medicine was accepted for referral to the House of Delegates. The motion on being put carried.

Dr. Marshall L. Fisher of Charlotte substituted for Dr. Allyn B. Choate in a special report of the Committee on Mental Health as follows:

That the Medical Society resolve to request the Governor to recommend to the General Assembly the establishment of a Multidiscipline Commission, and that this Commission be established because it is our belief that under the present Crime Against Nature Law and its frequent interpretation the mental health of many citizens is being unjustifiably and seriously impaired, and that this Commission after thorough study make recommendation for changes in legislation.

This is an outgrowth of certain experiences which we have had particularly in Charlotte recently having to do with the application of the law as presently on the books. This law has been under study in many of the states and has been effectively changed with certain provisions made for the treatment of these offenders rather than their simple incarceration under the severe penalty as presently stated.

We were fortunate in having in Charlotte last January the Executive Director of the George W. Henry Foundation of New York City, Dr. A. A. Gross, who made the recommendation for this Commission to the solicitor of Gaston and Mecklenburg Counties. This solicitor was instrumental in proposing to the last General Assembly a change in the Crime Against Nature Law, namely, the Miller Act, of Washington, D. C., which has worked effectively in Washington, D. C. but could not be anticipated to operate with sufficient effectiveness in North Carolina. The General Assembly referred the bill back to the Committee for further consideration and passed the change in the Sexual Psychopathic Law referring to juvenile offenders instead.

It is our contention that only a multidiscipline approach could be effective in bringing this about.

With your permission, I will read from Dr. Gross's letter to the solicitor following the visit to Charlotte:

Much legislation, no matter how well considered it may be, can meet with opposition because it has been too hastily proposed and therefore lacks the consent of the governed. To obviate that, the British have effectively used, as you know, what is called a Royal Commission, appointed by Parliament, to study the question, hold hearings, examine witnesses, interrogate experts in the field under study, invite all interested, even down to the humblest citizens,

to have their day in court. The Commission, after deliberation, brings in its report and offers a model bill for Parliament to accept or reject. Sometimes, necessarily, there are majority and minority reports when the Commission cannot agree to a document that will present its views. Again at the risk of stating the obvious, you will recall that some American States have undertaken to rewrite their laws in relation to sex offenders on the advice of modifications of this procedure, either through calling into being a Select Committee of the Legislature itself or by through gubernatorial appointment, as, for example, the Governor's Study Commission of the State of Michigan.

If such were within the province of the Governor of North Carolina and a small amount of money were available, I would suggest that you and those whom you might choose to associate with you approach His Excellency with the request that he appoint such a study commission. It would be well to have in mind a group that would not be too unwieldy, but would be sufficiently representative of those disciplines of learning that have to do with sex offenders. Certainly psychiatry should be represented, as should its handmaiden psychology. So should the social sciences. It goes without saying that one or more of the clergy should be numbered among the members of the commission, and on the more academic side certainly a member of the faculty of one or another of the excellent theological schools in the state, preferably one who would be teaching pastoral psychology under that or another name. Certainly the commission would need a judge of the Superior Court to give it prestige and his sense of the possible in dealing with this delicate subject matter.

It was agreed unanimously at the meeting of the subcommittee that this should be the recommendation to the Committee and it is now contained in this paragraph:

That since no changes in our laws on emotional disturbances as related to disorders of sexual behavior which are of medical significance have been made for the past 100 years it is recommended that the Governor be asked to appoint a committee to study this program and make recommendations to the Legislature.

I can assure you further that the Governor's Mental Health Council of which I am a member by reason of the fact that I am the President of the State Mental Health Association is considering a similar resolution to the Governor at its next meeting next month.

On motion duly made, seconded and carried, the report was accepted.

Dr. Wm. F. Hollister of Pinehurst reported for the Committee to Work with the North Carolina Industrial Commission as follows:

The relationship between this Committee and the North Carolina Industrial Commission continues to be an agreeable and understanding one. The number of contested cases sent to this Committee for joint discussion with the Industrial Commission has been reduced to about one-fifth the number reviewed three years ago. It is anticipated that another adjustment in the fee schedule will be made within the next year.

(These anticipations are based on discussions with the Industrial Commission.)

At the present time we are trying to work out some fairly uniform method and standard for rating disabilities resulting from industrial injuries with particular reference, at the moment,

to back cases. In regard to this problem we are attempting to correlate information from orthopedists and neurosurgeons throughout the state and then correlate this material with data we have available from other states.

Many of the minor problems relating to the Industrial Commission which have been presented to us by physicians have been worked out by our Committee.

(I think this is the important part of the report and one about which you gentlemen perhaps would like to hear some discussion.)

The Committee discussed the problem of intervention by a third party between the patient and the physician of his choice in industrial cases with Mr. Bean, Chairman of the Industrial Commission, at the last meeting on February 2, 1956 and Mr. Bean assured us that at no time did the Industrial Commission deny patients a free choice of physicians.

We have had a good many communications both from President Rousseau and other members of the Society in regard to this third party intervention. I think it is of some importance to know to begin with what the Act states. The Industrial Commission Act states that the choice of physician rests, with the carrier or the employer. Of course I don't think any of us had anything to do with writing the Act, but that is the law, and if Mr. Bean and the Industrial Commission wish to interpret the law verbatim as it is written then they can say to the carrier "It is your privilege to choose the physician" because that is the way the Act reads. However, it is Mr. Bean's interpretation, his personal interpretation, that he in no way wants to interfere with the free choice of physician. At the same time he realizes that certain corporations do have corporation physicians which he feels do give adequate Industrial Commission care. His main problem, as we all know, is to see that these patients who are being cared for under the Act are given proper medical care, and if he feels that a physician appointed by a corporation gives adequate care then he sees no reason why that patient should not continue to be under their care. But if that patient does not desire to be under the care of any one physician, application can be made directly to the Industrial Commission and Mr. Bean will see to it that the free choice of physician will be given to that patient, because the law further states that the choice of physician rests not only with the carrier but also with the employer. So the carrier could itself intervene.

To my knowledge, we have had no complaints about carriers intervening as far as free choice of physician is concerned.

Another thing, this Act, as I understand it in talking this over with Mr. Bean and other members of the Commission, this part of the Act, was passed in order to protect the medical profession because if any of us go to a legislature and say we don't like this phase of the Act, we would like to have it struck out, it might leave the situation wide open so that the chiropractors or any of these faddists could walk right in and take over Medical Care and the Commission itself would not have this phase of the Act to protect us. That is just a matter of interpretation.

On motion of Dr. Brooks, seconded by Dr. Garrison, the report was accepted.

Dr. Amos N. Johnson discussed the report of the Committee on Public Relations and some what related these activities to the work of the Committee on Postgraduate Medical Study with the thought diverting public relation revenues to the

employment of medical men who may have had experience in postgraduate medical education. There is one very excellent one available now who has had experience, and there is reason to believe that it would not cost too much certainly for a while to set him up in North Carolina. His purpose would be to coordinate with the medical schools, with the State Medical Society, with the local medical societies, a course, a plan, a very definitely planned course of postgraduate medical education for our people in North Carolina, having it on the level of courses at the medical schools, where you take it out to them in the rural areas and even to the point of transcribing it on discs to play on the phonographs at home.

A plan of this kind could go even further than that. We are having a tremendous amount of difficulty in the State of North Carolina at the present time with internship problems for those hospitals that are not teaching hospitals. By teaching I mean strictly our three university hospitals. If this man could come in to North Carolina and do as I have reason to believe he could do a job of setting up postgraduate programs at Charlotte Memorial, at Rex, at Watt's, at James Walker, at all of our better hospitals, then we could go further after we had gotten the ball rolling and talk to the deans of our medical schools with the idea that is getting prevalent in the United States and is being written about—this is a current *Journal* of the AMA—with reference to the teaching institutions foregoing the first year of internship and farming that out to competent schools within this state to take their one year of internship and then go back in training.

On motion of Dr. Paschal, seconded severally, the report was authorized to be accepted by unanimous vote.

On motion, duly made and seconded, the report of the Committee on Headquarters Facilities was received.

On motion of Dr. Sams, seconded by Dr. Paschal and carried unanimously, the Council authorized a sum addendum to the budget of the Committee on Maternal Welfare in the amount of the deficiency of the 1955 budget related to the 1954 budget or estimated at the sum of \$750.00 (shown by record to be \$960.00).

Dr. Arthur London presented a report of the Committee Advisory to Hospital Savings related to the status of the Doctors' Plan of Insurance, announced and launched in 1952, as to revisions recommended to meet present situations in this program. The Committee report consisted of two recommendations (1) that the limit on incomes of family for the Doctors' Plan ("A") be changed from \$3600 to \$4200 and (2) that an additional policy (Doctors' Plan "B") with an income limit of \$6000 be offered to the public. On motion of Dr. Sams to accept, seconded by Dr. Paschal, the report was discussed at considerable length with very positive answers being given by the Chairman to all questions put to him for clarifying purposes. There being no further questions from members of the Council and certain deputations of county societies the question was called for and upon being put carried unanimously.

The Council received a recommendation from Dr. J. Street Brewer of a matter of the two Blue Cross agencies desiring to underwrite the basic coverage which the Federal government proposes to extend to Civil Service Employees of United States where such employees are located in North Carolina to the end that the State Medical Society

endorse the principle of government participation in the basic coverage through the media of Blue Cross as provided in a substitute bill pending in the 84th Congress.

Resolution authorizing the Executive Secretary to communicate this action to the office of Senator Kerr Scott and to the office of Senator Sam J. Erwin was presented by Dr. Brewer. On motion of Dr. Wm. A. Sams, seconded by Dr. Henderson Irwin, the resolution was adopted. [Reference is here made to action of the Executive Council, Sunday, April 29, 1956, as reported to the House of Delegates, pp. 113.]

President Rousseau: Next Dr. Harry Johnson will report on the Committee on Increase in Dues.

Dr. Johnson: I have a letter here that will throw more light on this situation. As you know, the American Medical Education Foundation has been giving the medical schools of North Carolina better than \$20,000 a year, or between \$60,000 and \$70,000 a year, to the three schools since 1951. They have been raising their funds through solicitation, and through 1954 North Carolina doctors have contributed to the American Medical Education Foundation a little better than \$6000.

Last year we tried to get a grass roots campaign of soliciting the doctors, and we managed to get about \$6000; so that since 1951 the doctors of North Carolina have given to the American Medical Education Foundation in round numbers \$12,000 and the American Medical Education Foundation has given to the medical schools in North Carolina during that period of time nearly \$280,000.

As you know, it costs about \$15,000 to educate a medical student, and that money has to come from some place, and in order to try to keep the medical schools out of federal domination, the American Medical Association set up the American Medical Education Foundation which, in conjunction with a general fund, has raised this money.

To begin with, the American Medical Association set up \$1 million each year, I believe, for two years, and they have cut that to a half million dollars. I have a letter here from the Director of the American Medical Education Foundation which came just a few days ago. If I could read that I would appreciate it. It won't take but just a little time.

On April 15, a \$10,000,000 program of matching grants was announced by Mr. H. Rowan Gaither, President of the Ford Foundation.

These grants will be paid to the National Fund for Medical Education on a sliding scale in a program that could last up to ten years but might be accelerated to completion in five years, depending upon the rate at which additional contributions are developed.

In 1955 the National Fund received \$2,147,000 in un earmarked funds for distribution to the nation's medical schools. Of this amount, \$422,812 came from the medical profession through the American Medical Education Foundation in un earmarked monies. Under the Ford Foundation formula, if these receipts are of equal magnitude in 1956, there would be a Ford Grant totalling 70 per cent of this amount, or \$1,503,486; and all contributions in excess of the 1955 total would be matched dollar for dollar subject to the annual maximum of \$2,000,000.

There is more to the letter, but that is the gist of the thing. We will get a lot more from this

Ford Foundation if we put more into it, and I don't see how we can get much more by simply soliciting. Your President appointed a committee to study the matter, and it is the committee's recommendation that the Medical Society dues be increased by \$10. If the doctor wants to earmark that money for a medical school but not for a specific project in a medical school, that may be done.

There are five states that have set up an additional \$25 to their annual dues. Illinois set up \$25 additional to their annual dues in 1951. Four states did it last year, and I understand that the Illinois boys are getting a little bit disgruntled about it because so many of us are giving so little in proportion to the amount they are giving. It costs them \$25 additional to belong to their medical society, whereas we put up last year about \$6000.

After working this thing for three or four years, my personal feeling is that solicitation is a rather disappointing proposition. When the people from the American Medical Education Foundation go to the Ford Foundation and these various organizations and ask them for money, they want to know, what are your boys doing about it? They seem to think that primarily the problem of medical education is sort of the medical profession's baby. Thank you!

President Rousseau: Gentlemen, you have heard Dr. Johnson's report, that the dues be increased \$10 to be earmarked for American medical education. Before we discuss it, I suggest that someone make a motion.

Dr. Coppridge: I would like to discuss this report after a motion is made.

President Rousseau: You may discuss it without a motion if you wish, Dr. Coppridge. We won't be too parliamentary about it.

Dr. Coppridge: Mr. Chairman and Gentlemen: I was on the committee with Dr. Johnson on this matter. Unfortunately, I was out of the state when this committee met, and I sent him a statement of my thoughts about the matter. I will admit that he has a whole lot in favor of what he has told us. I think everybody here is very much interested in our medical schools, and I think anybody here who knows me knows that I have through the years tried to do all I could for these medical schools of the state. It is true that they are in bad financial circumstances and they need money, and I think we doctors ought to give them money. I think a lot of us do. I think there are men in this room that give anywhere from \$50 to \$100 a year on a voluntary basis to their medical school, and I am sure there are hundreds in the Society who make private donations to their school. I don't know what that amounts to in total in the states.

Dr. Johnson: The three schools received from the doctors of the state \$57,000.

Dr. Coppridge: \$57,000 was given by their own free will last year according to Dr. Johnson.

There are several things about this report that I disagree with. The thing I agree with wholeheartedly is the first sentence, namely, "The medical profession, generally speaking, is opposed to socialized medicine and to anything that may threaten to encroach upon personal privileges." That is a thing I am very much in favor of, but I believe the rest of the report doesn't follow the first sentence. I believe when we talk about dues in the Society we mean monies paid by the members for the running of the Society. This report does not deal with the raising of dues according to my general understanding of the word dues.

It is rather a tax. And why are we levying this tax? Dr. Johnson told you. Because they had tried to get them to do it freely, and they wouldn't do it, so now we are going to make them do it or else turn them out of the Society. That doesn't hit the right spot with me in organized medicine.

I know the labor unions have employed that manner of assessment and taxes on their members with a lot of success. They have built up millions of dollars, hundreds of millions of dollars, in the labor funds, and they do it by making assessments. The leaders in the organization get together and say, "Here is something that everybody ought to be giving to." Some little fellow down on the job says, "I don't want to give to it, I am not able to." "Well," they say, "it doesn't make any difference whether you can or are interested in it or not; you are going to have to do it or you can't work."

We are saying to anyone who might not be able to make a contribution or is unwilling to of his own free will, "Well, you have got to. We tried to get you to do it without it, and now we are going to force it on you. If you don't give it, you are going to be forced out of organized medicine."

I am in sympathy with Harry and the committee in wanting to do what the AMA wants us to do, and I am interested in the building up of that fund, but I am opposed to our levying dues in this Society for any other purpose than for the running of this Society. It is a dangerous precedent. We will be turning over to the Society the power of taxation or the power to make assessments on our members for anything that any group of leaders of the future might want to make one for. Some group will come along and say, "The doctor is not giving to the Heart Fund. He doesn't want to give or won't give. So add it to the dues." It is a principle that I think organized medicine ought not to follow, and I would like very much to see this report tabled because I think there are a large number of young men in this Society who are already finding that their dues, the money used for running this Society, are a little burdensome. We have young men working in the laboratory branches in our medical schools on very small salaries. We have a lot of people in our health departments that are trying to stay in organized medicine and help with the fight of organized medicine who might feel that they cannot afford to pay any more dues or any more assessments. For that reason, I oppose it.

I told Harry and the committee that I opposed it. While my name is typed to the report, I make this more or less informal minority report, and I do it with some apologies because I know at a meeting like this it is always unpleasant to have somebody get up and disagree, but that is what I have done.

On motion of Dr. Wm. A. Sams, seconded by Dr. F. P. Brooks the report was tabled by majority vote of the Council.

A deputation from the Caldwell County Medical Society appeared before the Executive Council with Dr. Chas. M. Kendrick acting head deputy and stated a summarized expression, as follows:

To: The Executive Committee
Medical Society of the State of
North Carolina

From: Caldwell County Medical Society
The members of Caldwell County Medical Society have been invited to participate in the Hospital Savings Association's new "Doctors' Plan."

These members have expressed surprise at

receiving this invitation in view of their past experience with the Hospital Savings Association organization.

As far back as 1951, Caldwell County Medical Society recognized the problem facing HSA in this county and met with officers of the organization. The results of the meeting, however, were unsatisfactory.

Thereafter, the Society became aware of criticism being leveled at its members, this criticism in some cases from representatives of HSA.

In January, 1954, the matter was again raised by the then Chairman, Physicians Advisory on HSA, and a further meeting to discuss the situation was suggested. This Society immediately accepted the suggestion, but since our previous experiences with officers of HSA had not been fruitful, and since this latest approach had been made by a medical representative, the Society expressed its willingness to meet with the Chairman and members of the Physicians Advisory Committee at any time.

This was agreeable with the Chairman of the Physicians Advisory Committee, and much time and effort was expended by members of this Society in preparing for the meeting. It came therefore as a considerable shock when the Chairman of the Physicians Advisory Committee informed us that his committee was not authorized to deal with such situations.

The Society thereupon requested that the correspondence be handed over to any medical group who could speak for HSA, with a view to following up the matter. The Society was subsequently informed that the correspondence had been handed over to the Executive Vice President of HSA from whom we would hear shortly.

To this date, which is two (2) years later, no word from this officer has been received.

Caldwell County Medical Society therefore submits the following to the Executive Committee of the North Carolina State Medical Society.

1. This Society has repeatedly expressed its belief in and support of the Hospital Insurance program on a fully competitive basis.

2. This Society has recognized and has long sought a solution to the problems of HSA in this county. Previous meetings with officers of HSA, however, have been productive only of what appears to be a mutual distrust. This Society would prefer to work with a State Medical Society sponsored organization, and for this reason, is attempting now—as it has done in the past—to work out an amicable settlement with a medical group.

3. This Society resents the implications which have been heard from different parts of the state that its members are guilty of abuses in their conduct of Health Insurance affairs, more especially when they originate from representatives of HSA. While all such reports are not necessarily reliable, there are a few which can be substantiated.

4. This Society feels that there appears to be on the part of HSA a reluctance amounting almost to a boycott of Caldwell County in trying to obtain HSA memberships. It is common knowledge that HSA has withdrawn from certain industrial groups in this county and has been replaced by commercial companies from whom no complaints have reached this Society.

5. The Society questions the motives of HSA in inviting Society members to participate in their new plan, when participation in their previous plans have apparently been so unsatisfactory.

6. This Society is a constituent part of the State Medical Society realizes and accepts responsibility in co-sponsorship of the State Medical Society sponsored Insurance Organization. By the same token, the Society feels that it should have access to a medical group in the case of any dispute in which it may be involved with such organization.

President Rousseau: You have heard this report, and I would like to have your recommendations as to what we shall do.

Dr. Sams: I think we would like to have a little bit more enlightenment on this. Dr. London, tell us what you know about it.

Dr. Arthur London: I know about this only to the extent of this report which Dr. Kendrick has just read to you and a copy of which was sent to me and a copy of a letter which Mr. Crawford sent the Executive Board.

So far, speaking for the Physicians Advisory Committee, I submit to you that this is not within the province of our Committee. The title of our Committee and the province of our Committee is that we are the Physicians Advisory Committee on the Doctors' Blue Shield Plan. This apparently has entirely to do with a company which is selling hospital insurance through Caldwell County. I think Dr. Smith, as Chairman of the Committee, did make a mistake in offering to come and talk to them about it in that capacity, and he corrected his mistake when he realized it was not within his province, and he said so. I have nothing to say.

On motion of Dr. Wm. A. Sams, seconded by Dr. George Paschal, the matter was referred to the Committee on Grievances of the State Society.

On motion of Dr. George Paschal, seconded by Dr. John Reece, the report of the Cornell University Medical School Report on Automobile-Crash-Injury Survey was authorized to be distributed to the members of the House of Delegates.

On motion of Dr. Wm. A. Sams, seconded by Dr. F. P. Brooks, the rental of storage space at Headquarters Office was approved.

President Rousseau: In regard to Life Membership and Honorary Membership of Dr. Lull and Dr. Love.

Mr. Barnes: Last year this Council adopted a resolution recommending that Dr. George Lull from Chicago and Dr. J. Grafton Love, of Rochester, Minnesota, be made Honorary Members of the State Medical Society. The report of the Constitution and By-Laws I think is going to make the recommendation that this class of membership be termed Life Members rather than Honorary Members for good reasons which they will report to you. Anyway, we have to bring this thing now to the House of Delegates for final action and ratification tomorrow, and there ought to be a suitable resolution, and I have presumed to draft one here, that for Dr. Lull. I don't know how to draft the other, but I will be glad to read this. It reads:

Whereas, George F. Lull, M.D., of Chicago, Illinois, is a graduate of Jefferson Medical College and licensed medical doctor in the State of Illinois, and

Whereas, He has exemplified great distinction in his career as a physician, military leader in the defense of his country, and lately of great distinction as the Secretary-General Manager of the American Medical Association during which

he has sacrificed great personal effort in bringing modern medicine and its supportive organizations into a more efficient state of responsibility, concern and activity in service to humankind everywhere, and

Whereas, He has generated in the hearts and minds of the members of this Society an admiration and an affection for his personal leadership and association in affairs of health and medical care related to the welfare of the people of this state, therefore be it

RESOLVED, That the Medical Society of the State of North Carolina bestow upon said GEORGE F. LULL, M.D., the high distinction of HONORARY MEMBER to the end that he may forever be recognized among the members of this Society for the love and affection with which his person and esteem is held, and that he shall enjoy all of the rights and privileges afforded by this rank of membership in this Society, forever

This the 30th day of April, 1956, A.D.

A similar resolution probably ought to be drawn in favor of Dr. Love.

On motion of Dr. Wm A. Sams, duly seconded and carried, the resolution was adopted both as to Dr. George Lull and Dr. J. Grafton Love.

Dr. Koonce: I realize as incoming President I have a right to appoint some committees which I might deem necessary. Since we won't have another meeting until next fall, unless there is some reason for a called meeting, there are two rather important committees that I would like to get the approval for the appointment of. The first is the Committee on Crippled Children. Some people think there are some inequities and what not. We do have an Advisory Committee in connection with Rehabilitation, and Crippled Children has a committee of its own, an Advisory Committee, and I think a Credentials Committee, but that committee is theoretically self-perpetuating and has no direct connection with the State Medical Society. I think we ought to have an Advisory Committee from the State Medical Society to consult with the Crippled Children's program because I think there are many things that should be straightened out, and that is one.

The second thing is that for some time all of us have realized, certainly after staying in this hot room and sweating today as we have been doing for many hours, that we are top heavy in committees. We have over 60-some committees.

Mr. Barnes sent me a copy of a survey which was made in the Philadelphia County Medical Society in Pennsylvania which is similar to this one in size. In that survey, one of the recommendations of the man making the survey was committee structure, and it impressed me no end, particularly that there would be five to six, possibly eight basic committees. All other committees would be subcommittees to that basic committee. During the year, the chairman of the basic committee would hold meetings with the chairmen of his subcommittees. The subcommittees would be appointed just as they are now. Just think how wonderful it would be if we could come to Pinehurst or Asheville or wherever we are going a few years from now and be able to sit down to hear six adequate committee reports which would be comprehensive reports of all of the subcommittees including the basic committees. I think we are top heavy. There are lots of places that our committees are repetitious, and, as all of us know, the great majority of the work of the Medical Society is done in a few hands. If you stop to think, there

are not over 200 available men out of the entire membership that you can get really to do a lot of work on a committee, and many times we abuse those men. I think if we could have a little better organization it would be very helpful.

It is not at Mr. Barnes' instigation, but the gentleman who does this work, Mr. Edlund, contacted Mr. Barnes. Mr. Edlund is a member of a firm who do nothing but make similar surveys of organizations like this, as well as business organizations. He was in Pinehurst about a month ago and called Dr. Rousseau, and Dr. Rousseau said it would come under my regime, so he called me and came down to see me. He has a setup whereby he could make an adequate survey of us, and the fee of his concern is \$200 a day plus expenses. He said it could be done he thought for between \$1500 and \$2000.

I want the approval to appoint a Survey Committee and have that Survey Committee with Mr. Barnes contact Mr. Edlund, or whatever concern they want to, and bring back to us next fall an adequate report of what a survey would do for us, what it would cost, whether it is feasible or not, and what we can do about our committee structure.

That survey would include primarily the committee structure, the Executive Department, which would include Mr. Barnes—and I am doing this with Mr. Barnes' approval.

On motion of Dr. Wm. A. Sams, seconded by several, the President-Elect was authorized to appoint a Committee on Crippled Children and a Committee on Structural Survey.

On motion of Dr. George Paschal, seconded by several and carried, Intern-Resident Membership extended on application to Dr. George Walton Fisher, Jr. at McPherson Hospital in Durham and to Dr. Ben J. Lawrence, Jr., at Western North Carolina Sanatorium in Black Mountain was approved for each.

On motion of Dr. Wm. A. Sams, seconded by Dr. Henderson Irwin and carried, a proposition from Dr. W. C. Davison in the form of a Legislative Bill to regulate the sale of "Box Lye" was approved in principle and referred to the Committee on Legislation for the purpose of securing enactment in the 1957 General Assembly of North Carolina.

A Resolution of meritorious recognition of Dr. David A. Allman by the Medical Society of the State of New Jersey was read for the information of the Executive Council and in response it was indicated that Dr. Allman would appear before the House of Delegates on April 30, 1956.

On motion of Dr. Leslie Morris, seconded by Dr. D. H. Bridger and carried, the Committee on Constitution and By-Laws was authorized to brief its report of a rewritten revision of the Articles of the Constitution and Chapters of the By-Laws to those containing revised sections of a salient nature of interest to the Executive Council (Dr. Roscoe D. McMillan, Chairman, reporting):

Dr. McMillan: We had to rephrase it somewhat to keep from paying some unemployment tax, and so forth. Of course, the title of the Society is provided in Chapter 1, Article I, of the General Statutes of North Carolina. We got some of that from them. It is The Medical Society of the State of North Carolina just the same. But we did have to rephrase the purpose of the Society to eliminate "the guarding and fostering" and eliminate "direction of public opinion" and so forth to avoid some taxes. But actually so far as the purposes of the Society are concerned, they are exactly the same.

There are really only four things that would be very controversial. Your Committee on Constitution and By-Laws are making recommendations that all the officers of the Society be elected by the House of Delegates instead of some of them in the general sessions. We recommend that all this be done by the House of Delegates instead of in General Session. We feel that a delegate is elected by the component county medical society and the House of Delegates is the governing body of the Society and that they should have the power to do the election. I don't mean they should take nominations from the Nominating Committee, but that the nominations should be made on the floor of the House of Delegates to elect the Board of Medical Examiners.

Dr. Sams: I am going to make a motion that this Council endorse the recommendation of this Committee and that we ask that the House of Delegates from 1962 on be the ones to elect the State Board of Medical Examiners, and that the Constitution and By-Laws be revised to that effect.

[The motion was seconded by Dr. Irwin.]

President Rousseau: Is there any discussion?

[The motion was put to a vote and carried unanimously.]

Discussion ensued upon the indication pro and con as to redistricting the county societies in the ten respective medical districts.

On motion of Dr. Wm. A. Sams, seconded by Dr. Milton Clark and carried, the Executive Council instructed each Councilor to discuss the matter at a subsequent District Society Meeting and report to the Council changes which may be desired by the respective county societies.

Discussion ensued on the request of a committee from the Medical Internists (Internal Medicine) that the Section on the Practice of Medicine be changed to the Section on Internal Medicine. The Council is recorded as having previously approved that such request be implemented.

Discussion ensued on the suggestion from the Committee on Grievance (formerly "Mediation") relative to a protective Constitutional section Discipline and Grievance Committee action.

On motion of Dr. E. W. Schoenhiet, seconded by Dr. Milton Clark and carried, such a section was authorized to be submitted to the House of Delegates as a revision to be enacted.

The Executive Council recessed at 5:30 o'clock to meet again at 9:00 A.M., Monday, April 30, 1956.

Monday Morning Meeting

April 30, 1956

The Executive Council recovered at 9:25 o'clock A.M. President Rousseau, presiding.

President Rousseau: The Council will please reconvene. We do have to consider the report from the Mediation Board which they could not report yesterday. Dr. McMillan.

Dr. McMillan: Gentlemen, you all have the report of the Committee on Mediation, and there were some recommendations made in regard to the Mediation Committee. We have had some information from the AMA in which they suggested that we change the name from Mediation to Grievance Committee. However, our Committee, in meeting on Sunday evening, felt that they would rather keep this with the Mediation Committee name than to change it to Grievance.

President Rousseau: Gentlemen, you have heard Dr. McMillan's request. We would like to have it discussed.

Dr. McMillan: Let me read from the report to give you the thinking back of this: "With the full realization as to both the variety of titles presently used and the reasons underlying the selection of some of these titles, Grievance Committee is unquestionably the most realistic title and the one best understood by the profession and the public. The term Grievance Committee has existed for many years through its uniform use by the American Bar Association and State Bar Associations. At present twenty state associations use this title; two use Board of Supervisors; and two use Mediation Committee. Some others used by individual states are Committee on Grievances, Grievance Board, Committee on Patient-Physician Relations, Committee on Medical Defense and Grievance, Judicial Council, Committee on Ethics and Discipline, Council on Professional Ethics, Committee on Professional Relations, Public Liaison Committee, Judicial and Professional Relations Committee, Judicial and Advisory Committee, and Welfare Committee.

"Any unfortunate disguising of a grievance committee's true purpose, by the use of inappropriate titles or by ascribing to it a multiplicity of functions, negates realization of valuable benefits to the profession and the public alike. The Grievance Committee is of such compelling importance in modern medical organization that a special committee, uniformly designated to disclose unmistakably its true function, should be created and maintained by every constituent association for this purpose and this purpose only."

That is the recommendation from the AMA relative to the name of it, so I was going to make the recommendation to the House of Delegates that it be changed back to Grievance Committee, and made this report to that effect. However, our Committee felt Sunday that the word Mediation should continue.

On motion of Dr. Milton Clark, seconded by Dr. E. W. Schoenhiet and carried, the Executive Council authorized that the Committee on Mediation be hereafter entitled "Committee on Grievances."

Discussion ensued whether component societies should organize and operate committees on grievances. While a formal action was not taken the consensus of expression was that county societies should be requested to establish a committee on grievances to make local investigations, information on which will be channelled through the District Councilor to the Committee on Grievances of the State Society; whereas the State Society would retain jurisdiction in the matter of receiving and making disposition of matters of grievances.

On motion of Dr. Donald B. Koonce, seconded and carried, the Executive Council rescinded its action of April 29, 1956, by which it recommended the election of the N. C. Board of Medical Examiners through the sole action of the House of Delegates, rather than election, as previously provided in the Constitution and By-Laws, by the General Session of the Society.

Discussion ensued on the formation, tenure, and procedure of the Committee on Nominations.

President Rousseau: Just one more item. Dr. W. W. Washburn is here. He was tied up all day yesterday in a meeting. He will report for Committee on Rural Health.

Dr. Washburn: I certainly hate to be in the position of delaying the Council. You have a copy of the report of the Rural Health Committee. I have a few points to bring up which won't take long.

In the report you have a recommendation of this committee for a series of meetings, Districts 1, 3, 5, 7 and 9 to have rural health meetings in 1957, and Districts 2, 4, 6, 8 and 10 to have rural health meetings in 1958.

To refresh your memory, we have one annual meeting. The work became so voluminous that we decided to have in addition to that two regional meetings, one in the East and one in the West. We found that three out of four people who went to the regional meetings did not go to the state meeting. We can reach more people, more doctors, more problems of health by having more meetings. We are therefore thinking in terms of having it in each of the Districts, but we thought too many meetings might be a bad thing, so we are suggesting one on alternate years in each of the Medical Districts, with the Rural Health Committee from those counties and the Councilor to be in charge of helping to set up such a meeting to be worked out with our Health Educator and the State Committee. I wonder if that would be satisfactory?

President Rousseau: Gentlemen, you have heard Dr. Washburn's recommendation. Do you want to take action on this?

Dr. Sams: I move that we adopt his report.

[The motion was seconded by Dr. Reece, was put to a vote and carried.]

Dr. Sams: I move that we endorse the resolutions on safety and refer them to our Legislative Committee for such action as they see fit.

[The motion was seconded by Dr. Garrison, was put to a vote and carried.]

[Following are the resolutions referred to by Dr. Washburn:]

Western Regional Rural Health Conference Hickory, North Carolina, March 14, 1956

Whereas, The farm and home safety problem is becoming more and more serious in North Carolina, we propose,

The appointment of the Governor's State Farm and Home Safety Committee in North Carolina, and

Whereas, The Agriculture Extension Service has direct contact with farm groups and conducts educational programs, we recommend the addition of a Farm Safety Specialist to their State Staff, and

Whereas, the State Board of Health has been conducting a demonstration Accident Prevention Program under a grant from the Kellogg Foundation, we encourage the continuation of this program as a part of the over-all Public Health Program in the state, and

Recommend that the State Committee, the Extension Specialist, and the Accident Prevention Section of the State Board of Health, work with existing state and local agencies in the promotion of safety education and accident prevention.

We, the undersigned Committee, move the adoption of this Resolution.

Signed:

Mrs. W. K. Hovis, Chm., Catawba County

Mrs. A. A. Doob, Yadkin County

Mrs. J. W. Bolton, McDowell County

Mrs. Cleo Finger, Lincoln County

Mr. Reid I. Thompson, Catawba County

Mrs. Oren Shaibe, Alexander County

Mrs. Reed Wilson, Cleveland County

Dr. C. E. Cloninger, Conover, N. C.

Medical Society

Mr. Worth Kiser, Gaston County

Dr. Henry F. Barnes, Cullowhee, N. C.

Medical Society

Dr. R. E. Reaves, Health Officer,
Burke County

March 20, 1956

* * * * *

Eighth Annual Rural Health Conference October 6, 1955

The Eighth Annual Rural Health Conference which was sponsored by the Committee on Rural Health of the Medical Society of North Carolina and supported by many farm organizations and other interested groups on October 6, 1955, passed the following resolutions:

Whereas, the ever-increasing complexity of agriculture in North Carolina requires an expanding use of farm tractors, heavy-duty farm equipment and electrically operated appliances, all presenting new hazards to life and limbs, and

Whereas, more and more use of insecticides, fungicides, herbicides and other potentially dangerous chemicals is inevitable, and

Whereas, North Carolina is expanding its animal production which requires additional safety precautions, and

Whereas, farm homemakers are using mechanical and electrical equipment on an ever-increasing basis, and

Whereas, the above-mentioned advances in technology and other changes are accompanied by certain inherent hazards, and

Whereas, it has been demonstrated in at least 15 other states that such hazards and resulting accidents can be materially reduced through an intensified educational program; therefore be it

RESOLVED, That the Eighth Annual Conference on Rural Health unanimously request the General Assembly of North Carolina to provide funds for the employment of a Farm Safety Specialist by the Agriculture Extension Service at State College to the end that a strong, aggressive and practical program on the prevention of accidents in North Carolina be carried out; be it therefore further

RESOLVED, That students in Vocational Agriculture and Home Economics in our colleges, be required, before graduation, to take courses in home and farm safety and fire prevention; and be it further

RESOLVED, That home economics and vocational agricultural courses in our high schools include the above subjects; and be it further

RESOLVED, That copies of these resolution be given to the Resolutions and Legislative Committee of all organizations sponsoring the Rural Health Conference.

* * * * *

On motion of Dr. Donald B. Koonce, seconded by Dr. John Reece and carried, the matter of the interest of the Society in relationship to promoting or sponsoring High School Science Fairs was referred to the Committee on Public Relations for future recommendations.

On motion of Dr. Wm. A. Sams, seconded by Dr. Henderson Irwin and carried, an allowance of Fifty Dollars (\$50.00) was authorized in support of the expenses of the State-wide winner of the Science Fairs to the National Science Fair to be held in Oklahoma City.

On motion of Dr. Wm. A. Sams, seconded by several and carried, the recommendation of Councilor Dr. F. P. Brooks of the Second District that Dr. William Bell of New Bern be designated to succeed Dr. F. M. Simmons Patterson as Vice Councilor of the Second Medical District was adopted.

The Executive Council adjourned at 10:15 o'clock A.M.

MEETINGS OF THE HOUSE OF DELEGATES

MEETINGS OF THE HOUSE OF DELEGATES SPECIAL CALLED MEETING MONDAY MORNING SESSION

April 30, 1956

A special meeting of the House of Delegates of the Medical Society of the State of North Carolina convened in the ballroom of The Carolina Hotel, Pinehurst, North Carolina, at ten-twenty o'clock, President James P. Rousseau presiding.

President Rousseau: Will the House of Delegates please come to order. I want to welcome all of the members of the House of Delegates and thank you for coming.

At this time, Dr. Westbrook Murphy, Speaker of the House, will announce the purpose of this special called meeting. I hope it will only take a few minutes.

Speaker Murphy: Mr. President and Gentlemen of the House of Delegates: As the first step in organizing the House, it is necessary to ascertain the presence of a quorum. The Constitutional Secretary will proceed with the roll call.

Dr. Hill: Before I begin that, I would like to recognize first some distinguished guests that we have with us today and would like to ask them to stand. The first man I want to recognize is Dr. George Lull. I wish he would stand and take a bow. He is Secretary and General Manager of the American Medical Association. [Applause]

The next man is a man from Atlantic City. He is the Chairman of the Legislative Committee of the American Medical Association and is a State Society candidate for President-Elect of the American Medical Association. He is having a tough campaign. He doesn't have any opposition. Dr. Dave Allman! [Applause]

We have another distinguished guest with us. Dr. Warren Furey, whom you will hear from later. He is from Chicago, Illinois. Dr. Furey! [Applause]

Dr. Hess is not in the House, is he? He will be with us later. [The roll was called.] A quorum declared present.

Speaker Murphy: It is wonderfully reassuring most of the time to have an attorney for this Society. You notice I say most of the time. I wish to announce that at the regular session this afternoon we will handle the certification of your credentials. We won't have to do that here. That will be, of course, a saving of time. We will try to call the House of Delegates into regular session promptly at two o'clock. The Chair will use every reasonable and legitimate means to expedite the business and make it as painless as possible, but we must have your cooperation first by your being here at two o'clock.

This is a special called meeting, called by the President under the authority granted him by our Constitution, to consider one matter, and that is a change in our By-Laws concerning the time of the presidential address at the annual meeting and other implementing provisions. Dr. Roscoe McMillan and his Committee on Constitution and By-Laws have prepared an amendment which will be submitted for your pleasure. Dr. McMillan!

Dr. McMillan: Mr. Speaker, Mr. President, Ladies and Gentlemen of the House of Delegates: Your Chairman on Revision of Constitution and By-Laws wishes to make the following resolution:

To amend Chapter V, Section 3, of the By-Laws by adding at the end of said Section the following: provided, however, that the President-Elect shall be installed and take office as

President at such time during the Annual Meeting of the Society as fixed by the Executive Council.

I might add to that resolution that every other officer will be considered in a general section of the By-Laws at a later date. Particularly now it is only the President-Elect whom we are considering.

Dr. Strosnider: Mr. President, I move the adoption of the resolution as read.

Speaker Murphy: Dr. Strosnider makes a motion to bring this change in the By-Laws about. May I call your attention to the fact that there will be another called meeting of the House of Delegates at two o'clock tomorrow, Tuesday, May 30, 1956. If you pass this at this time, that will be a formality, since it must lay on the table for 24 hours, but we will have a called meeting later. You have heard the motion. Is there a second?

[The motion was seconded by Dr. Curtis Crump.]

Speaker Murphy: Is there any discussion of this motion? (Discussion of a clarifying nature ensued.)

Speaker Murphy: If this House of Delegates sees fit to adopt this amendment and it is reaffirmed tomorrow, then, on Tuesday night, Dr. Koonce will be installed as President, and he will be President from that time on. Of course, that curtails Dr. Rousseau's term of office, but he is quite willing and from this time on each man will serve the full twelve months.

Speaker Murphy: Is there any other discussion of the motion? If not, all in favor say "aye"; opposed, "no." The motion is passed.

Unless I hear some objection, the Chair will declare that this special called meeting is adjourned, and may I urge you please to be back at two o'clock.

[The meeting adjourned at eleven o'clock.]

MONDAY AFTERNOON SESSION

April 30, 1956

The House of Delegates convened at two o'clock, the meeting being called to order by the President, Dr. James P. Rousseau.

President Rousseau: The House of Delegates is now in session. Ladies and gentlemen, it is a great pleasure to have so many of you present. I will now turn the session over to our Speaker, Dr. Westbrook Murphy.

[Dr. Murphy assumed the Chair.]

Speaker Murphy: The meeting will be opened by an Invocation by the Reverend William Sidney Golden, Pastor of the Presbyterian Church at Carthage. (The invocation was rendered.)

Speaker Murphy: Dr. Hill, our Constitutional Secretary, has some announcements.

Dr. Hill: The exhibitors, as you all know, make this meeting possible in a lot of ways, and particularly financial. This afternoon, the officers of the State Society and State Chairmen of Committees want them to meet us at the Country Club. When we adjourn here at five o'clock, and it will be over in time for you to get here for our evening meetings.

Mr. Speaker, I think that is about all I have.

Speaker Murphy: The time has come for a report from Dr. Milton S. Clark, Chairman of the Committee on Credentials.

[In Dr. Clark's temporary absence from the room, Dr. Wingate Johnson arose and reported a quorum present for him and added the names

of a couple of additional delegates who had had their credentials passed.]

Speaker Murphy: If there is no objection, the Chair will accept that report for further action by the House.

We believe that it would be perfectly legitimate if there were made and passed a motion to assume that all of those that were here this morning are here this afternoon, and instead of a complete roll call the Secretary will call the counties, and any men who have come in, who were not accredited this morning, stand and give their names.

Dr. Dixon: I so move.

[The motion was seconded by several.]

Speaker Murphy: Is there discussion?

[The motion was put to a vote and carried.]

Speaker Murphy: The Secretary will proceed.

Dr. Hill: I will call the county, and in the case of those that have come in, when I call the county, stand and give us your name and address and whether you are a delegate or an alternate.

[The roll was called in accordance with the above procedure.]

Dr. Hill: Mr. Speaker, I declare a quorum present.

Speaker Murphy: A quorum having been declared, the House is now ready to undertake the transaction of the business of the session.

May I call the attention of the audience to the fact that this roped-in section is for the use of the delegates, so when it comes to the time that we need to count votes, when the Secretary does, that facilitates that process.

I should like to appoint as a committee to study and report on the President's message three gentlemen: Dr. William Coppridge, of Durham, Chairman, Dr. Ben Royal, and Dr. Street Brewer.

I have been connected with the Medical Society in some capacity for a good many years, and, with due credit to all of his predecessors, I can say without fear of contradiction that Dr. Rousseau has been the most sympathetic, the most understanding, and the most intelligent and the most industrious President within my experience. With that little introduction, the House will be happy to receive his annual message. Dr. Rousseau! [The audience arose and applauded.]

President Rousseau: Thank you, Mr. Speaker, for your very kind remarks.

ADDRESS: HOUSE OF DELEGATES MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

May, 1956

J. P. Rousseau, M.D., President

Members of the House of Delegates, Distinguished Guests, Ladies and Gentlemen and Fellow Members: It is the time for your president to make a progress report to you of the Society's past year's activities, and to make suggestions for the future progress of the Society. The past twelve months of my life have given me unusual, diverting and rewarding experiences. I assure you it has not been dull. In reflecting upon my year of stewardship, I want to renew my good wishes to all and to express my sincere and humble gratitude to those who have given support to our efforts and to the members of the House of Delegates for giving me the opportunity to serve in the highest office of the Society.

I could not in good conscience fail to recognize the great debt of gratitude owed by me to the Officers, the Executive Council, Chairmen and mem-

bers of our many committees, and to all others who have given so liberally of their time, knowledge and experience at great personal sacrifice to themselves. I am deeply grateful for the loyal support of my close friends in my own County Society of Forsyth.

I especially wish to express my great appreciation to our Constitutional Secretary, Dr. M. D. Hill, our Executive Secretary, Mr. J. T. Barnes, our Director of Public Relations and Assistant Executive Secretary, Mr. William N. Hilliard, our Director of Rural Health and Education, Mrs. Annette Boutwell, and to all others on the Headquarters Staff for their wholehearted cooperation.

Dr. Hill's great devotion and efficient service to the Society is well known. He has not only served effectively at the State level, but has rendered invaluable service to our Society and to medicine as a delegate to the American Medical Association. As proof of this, his friends and colleagues in the American Medical Association bestowed upon him the high honor of being Vice-President of the strongest and biggest Medical Society in the world. Dr. Hill has brought honor to our Society and State. We are very proud of him, and again, we extend to him our hearty congratulations and very best wishes.

Mr. J. T. Barnes' very efficient performance of his many varied and demanding duties in the interest of the Society make him an invaluable member of our staff. His keen intellect, boundless energy, good humor and amiable warmth have won for him many friends in medicine, not only in North Carolina, but in many other states and in the American Medical Association. Everywhere I have been this year I have heard nothing but high praise and commendation of him. I attribute his success to his native ingenuity, ability, high ideals, devotion to duty, the will to work and the desire to render a public service to mankind. Mr. Barnes has in the past year had many tough assignments and he fulfilled them with distinction and with a minimum of fanfare and controversy. He is a friendly, modest man who does not seek the plaudits of his fellow man. These attributes have given to him added stature.

Mr. William N. Hilliard and Mrs. Annette Boutwell have rendered most valuable service in the fields of Rural Health and Public Relations. Through their joint efforts with the respective committees, North Carolina is recognized nationally as a leader in these two important fields. From them I have received much valuable assistance, guidance and support. They have been helpful in many other Society projects for which I am most grateful.

Our very able attorney, Mr. J. H. Anderson, Jr., has given wise legal counsel on many important questions. Even though the legislature has not been in session, we have managed to keep him busy. I am sure he has kept us out of trouble. His valuable advice and legal opinion deserve the sincere appreciation of the Society. He has given prompt and efficient service on every occasion in which it has been necessary to call on him. He has repeatedly demonstrated his deep and sincere interest in the welfare of the Society, its members and the public.

I also wish to pay tribute to the strong and active Womans' Auxiliary. Its members have been active and energetic in many fields in the interest of the Society and the public welfare. Their achievements have been outstanding in areas in which we ourselves could have accomplished but little. President Croom has demonstrated leadership and has served with grace, dignity and honor in her many demanding responsibilities.

It will not be possible in the time allotted to discuss or even mention all the many activities in

which our Committees have been engaged. Full Committee reports will be published in the August issue of the North Carolina Medical Journal. Your Officers and the Executive Council have studied their recommendations and approved them. Every member should study them and give the incoming officers your comments and suggestions.

At this point I wish especially to pay tribute to the Editor and the Editorial Board of the North Carolina Medical Journal for the many valuable contributions made to both the scientific and business affairs of the Society. Our Editor, Dr. Wingate M. Johnson, in his usual direct and factual manner of writing has kept us well posted on all important scientific and research progress in medicine, as well as with the business affairs and legislation affecting organized medicine.

Your Officers, the Legislative Committee and hundreds of individual physicians have given much time to Medical-Social legislation introduced in the Second Session of the 84th Congress. We joined with other State Societies and with the American Medical Association in vigorous and, I think, successful opposition to all legislation which is detrimental to the health and welfare of our American citizens and to our freedoms in medicine. We are encouraged to believe that we were successful in opposition to H. R. 7225, which if enacted, will be the greatest step ever taken toward Socialized Medicine. Physicians must be eternally vigilant and prepared to counter the vicious schemes of the Socialists with positive programs. Unless we are willing to spend and be spent in this battle, we are sure to lose all that is precious in our Free American system of medicine.

An important step for the future welfare of the Society and its members for many years to come was the purchase of valuable property on the Raleigh-Durham highway for the erection of our Headquarters Offices. Those of you who have been in our offices recently fully realize that they are bursting at the seams with important and valuable records of the Society and that additional facilities are a necessity. I believe every member will be proud of the ownership of this property and building when plans are completed. Approximately 51 acres of property were purchased. As the value of this property increases, as it surely will, all except the required acreage for our use can be sold to selected and desirable neighbors.

A special committee has been busy studying every possible place in North Carolina to hold our annual meeting. A change from Pinehurst is necessary, due to the admission of Negro physicians as scientific members. I think this action was right, and the Society must not renege on its promise to them. Their silence, however, suggests to me that they are not satisfied with our action of last May. I am equally certain that this is all we have to offer at present. I am happy to report that the committee recommends Asheville, North Carolina, as offering adequate and excellent accommodations for all members, which most likely excel those at Pinehurst. We are hopeful that similar facilities will be available in the central and eastern sections of the state in the near future.

An agreement has been completed with the St. Paul Mercury Indemnity Insurance Company of St. Paul, Minnesota for professional liability insurance for all members on a voluntary basis. The premiums for this coverage will be based on claim losses in North Carolina, rather than on losses sustained at the national level. These losses will be reviewed annually by the company and the Society. This should result in considerable reduction in the cost of professional liability insurance. It does not in

any way condemn, prejudice, or discriminate against any of the present insurance underwriters with whom physicians may now be insured. It does not require a franchise contract between the Society and the company. To be successful, it will require the enthusiastic support and participation by the membership. The plan will be activated as quickly as possible following this meeting. Methods of procedure in obtaining this liability protection will appear in an early issue of the Journal. The number of malpractice suits and the size of the awards are increasing so rapidly over the country that prompt action is indicated in this important matter.

The Executive Council has approved annual registration of physicians in North Carolina which will be of great value to the medical profession, and to the Board of Medical Examiners in the important question of self-regulation. Unfortunately a few doctors get out of line, and we must call them to task. It will provide a method for us to know if and when a doctor leaves or returns to North Carolina, and what he has been doing in the interim. It will be necessary to amend the Medical Practice Act in the 1957 legislature.

After long and tedious hours of study, our Insurance Committee recommends, and the Executive Council has approved the extension of the Doctor's Insurance Plan to the \$4,200 and possibly the \$6,000 income groups with a commensurate percentage-wise increase in physician's fees. We must do everything possible to obtain wider prepayment insurance coverage in the low income groups. The chief reason for increasing the income limits for service benefits is that since the inception of our plan, the \$3,600 low income group has moved up to the \$4,200 and \$6,000 income levels. We do not believe that the full payment principle should apply to all levels of income. We do believe, however, that full payment must apply to all lower levels of income where medical expenditures cannot be met by the individual.

Physicians in North Carolina should realize that in the Doctor's Plan, the practicing physicians control and fix the fees themselves. This is as it should and must be. It is not true in any other insurance plan. It is the only way of preventing governmentally controlled medical programs where fees will be fixed by the one person, who can be found in a bureaucracy who knows the least about medical practice.

We realize that physicians do not like to be told by anyone what his fees for service should be, and that the present fee schedule has inequities. I am also positive that these will be adjusted by our Insurance Committee. Most of us know that the powerful trade unions, industry and government are demanding service benefits. If we do not provide them in the Doctor's Plan, they will do it for us and we will not like it.

The time is here when we must turn our attention to: (1) The payment of benefits without requiring admission to hospitals; (2) Doing as many diagnostic and treatment procedures as possible before admission to hospital; (3) Avoiding repetition of these in the hospital; (4) Eliminating unnecessary delay in hospital treatment; (5) Prompt discharge when hospitalization is no longer required; (6) Reducing unnecessary admission by definite standards; (7) Establishing standards for ancillary services and drugs to effect maximum economy without any lowering in the high standard of medical care. If this abuse is not checked, insurance plans will necessarily price themselves out of the market because of abuse and ever increasing cost in premiums.

The Executive Council has approved the Society's

going to the 1957 legislature in an effort to have the state purchase Blue Cross Insurance for the indigent patients in the state. This does not encompass any professional fees for the indigent. Free professional service to them is our right, privilege and pleasure, and one of the greatest satisfactions of most physicians. We must not allow subsidization of professional services of any agency for charity patients.

We hope that plans may be derived whereby low income groups just above the indigent level can be encouraged to purchase as much Blue Cross and Blue Shield Insurance as they can afford. If achieved, it will help this so called "medically indigent" group maintain their pride and self-respect by having a definite part in payment for their medical care.

In many hospitals the pay patient is subsidizing the hospital deficit resulting from care of the indigent. Physicians who give free services to these indigent patients must be interested in their private patient's financial plight. We should educate the public that it is primarily a local and state responsibility to provide adequate tax funds to meet such deficits. The private patient, disabled and struggling with mounting hospital cost, should be relieved of what is clearly a state and community responsibility.

Our Public Relations Committee's activities have been increased and expanded in order that our public relations program will reach more people. This year two meetings were held, one in Winston-Salem, and one in Durham, in an effort to bring in the medical students and house officers from our three medical schools and to reach more physicians in the state. One chief benefit will be to help young physicians enter the practice of medicine well informed on the following problems: Public relations, ethics, physician-patient relationship, physician-physician relationship, privileged information, relationship to the press and various new media, medical-legal aspects of practice, the Federal Narcotic Law, the North Carolina Law governing the use of non-narcotic drugs, the purchase of and renewal of Narcotic Stamps, registration of Medical License with Clerk of Court, the purchase of North Carolina Privilege tax, the question of average fees in the communities, duties as an expert witness and many other questions about which they are wholly uninformed. In this manner, we hope to prevent young physicians from inadvertently violating the law and the Code of Ethics, which often results in serious trouble for them. Public Relations is something everyone has whether we want it or not or whether we consciously intend doing anything about it. In the final analysis the individual physician is largely responsible for public relations. The Society provides certain valuable principles as a guide as we strive to accomplish our prime purpose of serving the common good and improving the health of mankind. The best public relations a doctor can have is to carry out his primary goal as Dr. Hess said: "To treat sick people."

I would like here to quote from the Congressional Record to further emphasize how true this is. Hon. J. Allen Frear, Jr., of Delaware said in the Senate of the United States, January, 1956; "Mr. President, every member of this body has heard and read a great deal about the medical profession. Some of what has been said has been good, some of it not so good. In the December 26 edition of the Delaware State News, New Dover, Delaware, there was sent a letter to the editor. This letter was written by an eleven year old child, but it expresses the sentiment of thousands of people in our

community including adults as well as children. I am very pleased to concur wholeheartedly in the expression of the letter. No doubt many of our colleagues, as well as others, would like to read it, so I am asking unanimous consent to have the letter printed in the appendix of the record."

There being no objection, the letter was ordered to be printed in the record as follows: "Dear Mr. Smith: One night I was reading a magazine called the "Upper Room." The article was written by a man from Ontario. It was about a doctor who had served his community for fifty years. In the middle of the town was a monument honoring the doctor for his unselfish work. He neither became rich nor famous. But he made many people happy and helped people if they were sick. The article reminded me of Dr. Benjamin Burton. Dr. Burton answers calls all hours of the day and night. He would do anything for a sick child without thought of pay, he does a lot of things out of the kindness of his heart. Dr. Burton reminded me of the doctor in the story. I think he is one of the finest men I have ever known. I think he is what a doctor ought to be. Signed, Sincerely yours, A patient of Dr. Burton, age eleven."

Our Rural Health Conferences have spread to a wider geographical area in the state and there has been a marked increase in participation in these programs by Health Agencies, the Farm Bureau, Community Lay Organizations and increasing numbers of lay citizens in urban and rural areas of the state. Some County Medical Societies have also initiated Rural Health Conferences, which have been welcomed and cordially received by the public. This year three Rural Health Conferences were held, one in Raleigh, one in Clinton, and one in Hickory. It was my privilege to attend two of these conferences, and I assure you that much progress is being made. Our Society stands at the top of the list of the 48 states in this important field of health.

A Liaison Committee of the Medical Society to work with a similar Committee of the North Carolina Bar Association has given intensive study to methods whereby relations between our two professions may be improved. Doctors and Lawyers have a great responsibility to our patients and clients in court matters. To serve our patients and the Court as expert witnesses is just as much our duty as it is to treat their physical ailments. This joint committee has derived and adopted a Medical-Legal Code of Ethics which will be immensely helpful in promoting a better understanding between lawyers and physicians in the question of expert witness testimony. I know of no other area in which the obtaining of factual evidence is more burdensome than that of the physician as an expert witness. This should not be true and the experience of doctors and lawyers in giving and obtaining expert testimony should not be unpleasant. Better relations should also result in a reduction in the number of malpractice suits in which there is not one iota of evidence that the physician has been negligent.

County Medical Societies have been encouraged to let the public know of the valuable services to them and to physicians of the Grievance Committees of the County and State Medical Societies. These committees play an important role when issues of controversy about fees, negligence and many other misunderstandings arise. Many malpractice suits have been averted, and good will, respect and esteem for the medical profession have been regained. A lawyer recently wrote, praising a County Society Grievance Committee for the valuable service rendered a client of his, who had lodged a

complaint against a physician. He went on to say that his high respect of the Medical Profession had increased and that his client's respect and confidence in his physician had been completely restored by the unbiased study and recommendation of the committee.

The able Committee on the Medical Examiner System, enacted in the 1955 Legislature, has made progress in the establishment of this system in some counties. Progress will be slow because of the County Commissioner's fear of increased cost. The chief benefit of the Medical Examiner System, in replacing the antiquated coroner's system, which is ten centuries old, will be to protect the innocent and penalize the guilty in all deaths occurring under questionable or suspicious circumstances. It is important that every County Society assist this Committee in educating the County Commissioners, in their respective counties, as to the need and importance of the Medical Examiner System.

A strong and active committee has devoted much time to the question of better education and medical care at the House Officer level. We are hopeful that North Carolina will develop a residency training program that will attract graduates, not only from our three great medical schools, but from other schools that will meet the intern and resident demand in all our approved hospitals. It will require the cooperation of the professional staff, the medical schools and the Medical Society.

Many other programs are under consideration by various committees, concerning which we must lend full support. They include continued study and support of: (1) Blue Cross-Blue Shield Insurance Companies; (2) Study of catastrophic insurance; (3) A State-wide blood bank program; (4) Methods whereby our chronically ill, aged and physically handicapped citizens will receive better medical and rehabilitative care. The problem of aging is a big subject which includes almost all medical problems, and some peculiar ones of its own. We must generate public interest, enlighten and improve the public attitude toward this rapidly increasing problem. We must bring the latest developments in research, techniques and rehabilitative facilities to help our senior citizens live a more vigorous, happy and useful life, not one just of survival, hopelessness and despair.

In this age of the Hydrogen and Atomic bombs, we must be certain to maintain a modern alert and active Civil Defense program. Our continued participation, cooperation and assistance to our State Health Department and Public Health Agencies are imperative in the interest of continued progress in Preventive Health and better medical care. We must continue to give financial support within our means to our fine medical schools. You can see that the attainment of our goal requires the sincere interest of every member of this Society, and demands his best efforts for as long as may be necessary.

I recommend the adoption of these programs. They make one big project of the Society to strengthen our freedom and improve medical care to our important patient. It is a program well adapted to the past, present and future objectives of the Society. It is a campaign any physician could embrace and which should keep all of us busy through the coming year. There must be no lassitude, apathy or complacency in our efforts to achieve these goals. Every member must be genuinely behind this program. Every physician knows that the most compelling issues which face us are our peace and freedoms. We must strengthen and improve both. I can say with certainty that success depends on how you accept your individual responsibilities to the Society.

I will not discuss the pitfalls in our uneasy relations with the Socialist planners and politicians to socialize medicine, but neither will I belittle them. They employ duplicity, subtlety and enticement, but I am certain our position will counter these tactics. We must not leave a free field for the Socialist in the field of humanitarian social legislation. We must offer positive and constructive programs of better medical care for sick people.

What we do will shape the future practice of medicine. We must be dedicated to human freedoms. We must use our heritage and responsible leadership in the field in which we are so thoroughly qualified to lead by reason of our special training, skills, and license. Your efforts singly and combined will contribute to building a lasting tradition of individual responsibility and a lasting tradition of free enterprise in American medicine. When there is no longer a threat to our independence, we can then plan for what little time we have left to be our own masters.

In completing this accounting of my stewardship, I would like to submit that this Society is economically sound, united, strong, healthy and well aware of its increasingly important position in this state and nation. I trust it will remain so and that your incoming President, Dr. Donald B. Koonce, will enjoy the same cooperation in his term of office as it has been my privilege to have from every member.

Finally, I am confident that under Dr. Koonce's leadership the affairs of the Society are in strong and capable hands. His long standing interest, loyalty, ability, energy, dependability and keen intellect thoroughly qualify him as a progressive leader. I congratulate the Society, myself and my fellow members that the House of Delegates elected him and that he is willing to serve as our President.

Speaker Murphy: Dr. Rousseau's very thought-provoking address requires no action. It will be referred at this time to the special committee to consider which I have just appointed.

We now receive the report of the Vice President of the American Medical Association and our experienced and ever-faithful Secretary and Treasurer, Dr. Millard D. Hill.

Dr. Hill: Mr. President and Mr. Speaker: Before I report, I see one of our distinguished guests has come in who was not here a while ago. I would like to introduce him to you and ask him to stand. He is Dr. Warren Furey from Illinois, a delegate to the American Medical Association, and he will be one of our guest speakers.

The reason I am here before you is because the Constitution and By-Laws says that I have to come without fail.

This is the report of the Secretary-Treasurer of the Medical Society of the State of North Carolina.

REPORT OF THE SECRETARY-TREASURER of MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

Mr. Speaker and Members of the House of Delegates:

As Secretary-Treasurer of the Medical Society of the State of North Carolina, it is the duty, imposed by the By-Laws, to bring to you annually a report on the general and fiscal operations of this Society. Therefore this report will cover finances of the last fiscal year, January 1, 1955 to December 31, 1955. Otherwise, the report will deal with activities for the year approximately May 1, 1955 to the current April 26, 1956.

In line with my currently assigned duties and responsibility, I report that all revenues rightfully accruing to the Medical Society of the State of North Carolina have been fully collected, accounted for and placed in the depository selected and used over the years for the safety and security of the funds. All of these funds have been accurately recorded and credited upon the records and books of Headquarters Office in a manner not only acceptable to me but to the accountants of the auditing firm of A. T. Allen & Company of Raleigh, N. C. Moreover, all the dispensing of the funds utilized in the Society activity for 1955 have been proper and in line with authorizations of this House of Delegates and/or the Executive Council. It is my view that the complete administration of the fiscal affairs of this Society have been performed in line with these authorities and that no question of the equitable and proper handling of all funds can be justified.

I wish to report:

1. The membership in the course of 1955 reached another high on December 1, 1955 of 3,004—had all such members have extended membership into AMA we would have become entitled to an additional Delegate.
2. Membership on April 27, 1956 was 2,679.
3. The reserve assets of this Society remained approximately the same and the single matter of which particular note should be taken is that \$25,000 of the reserve fund was invested in land which is regarded as of equal value to the funds so invested.

The report of the Auditing firm of A. T. Allen & Company which conducted an audit of the period January 1, 1955 to December 31, 1955 has been prepared and certified in line with the usual assignment to them as Certified Public Accountants, a firm recently engaged to audit the books of the North Carolina office of State Auditor as a routine point of good business. The report of the Auditor for this Society is herewith attached as a part of this report.

Respectfully submitted,
Millard D. Hill, M.D.
Secretary-Treasurer

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA, INCORPORATED

Raleigh, North Carolina

12 Months Ended December 31, 1955

OFFICERS

Dr. J. P. Rousseau	President
Winston-Salem, N. C.	
Dr. Donald B. Koonce	President-Elect
Wilmington, N. C.	
Dr. Edward W. Schoenheit	First Vice-President
Asheville, N. C.	
Dr. Milton S. Clark	Second Vice-President
Goldsboro, N. C.	
Dr. Millard D. Hill	Secretary-Treasurer
Raleigh, N. C.	
Mr. James T. Barnes	Executive Secretary
Raleigh, N. C.	

Chairman and Members of the Finance Committee
Medical Society of the State of North Carolina, Inc.
Raleigh, North Carolina

Gentlemen:

Pursuant to engagement, we have audited the books and records of the Medical Society of the State of North Carolina, Inc., Raleigh, North Caro-

lina, for the period beginning January 1, 1955, and ending December 31, 1955, and present herewith our report.

Exhibits And Schedules:

In presenting to you our findings, as the result of the audit, we have prepared four Exhibits and three Schedules, as enumerated in the Index, which are attached hereto as a part of this report.

Balance Sheet—Exhibit "A":

The first statement is a list of the Assets, Liabilities, Reserves and Net Worth, which we designate as Balance Sheet, December 31, 1955, Exhibit "A". This Balance Sheet has been divided into two sections. One contains the Current Operating Fund, which represents the Current Assets, Liabilities and Reserves, while the other has been designated as a Capital or Non-Operating Fund containing the office equipment owned and used by the Medical Society at estimated values established in a prior year, plus actual cost for purchases during the last seven years and a real estate option on land located on the Durham-Raleigh Highway.

The cash in the First-Citizens Bank and Trust Company, Raleigh, North Carolina, in the amount of \$1,266.76, was verified through a reconciliation of the balance as shown by the records of the Medical Society with a certificate which was obtained independently from the bank. This reconciliation is shown in detail in Schedule—1 of the report. The \$50.00 petty cash fund was counted.

Accounts receivable in the amount of \$71.70 is shown on the Balance Sheet and, in the main, represents the total of several uncollected balances due for advertising in the State Medical Journal. As the amount is relatively small and the accounts deemed "good", no verification of them was made.

The investment in United States Defense and Savings Bonds is shown at cost value of \$91,468.00, in the Balance Sheet, and in detail in Schedule—2 of this report. This figure includes Series "F" Bonds. (3) \$10,000.00 bonds, (1) \$5,000.00 bond and (2) \$1,000.00 bonds at a cost of \$27,380.00, which were disposed of in January, 1956 in order to obtain funds to purchase real estate for the future site of The Medical Society building. The receipts for these bonds (\$29,723.00) were deposited in the bank on January 6, 1956. The Series "F" and "J" Bonds have an increment in value, due to lapse of time since date of purchase, by approximately \$4,848.40; however, this additional value has not been taken into account in this report. Of this increment in value \$2,343.00 is applicable to the bonds disposed of in January, 1956.

The office equipment and furniture shown on the Balance Sheet in the amount of \$17,039.78 is listed in detail in Schedule—3. This represents an estimate made in a prior year and adjusted for purchases made during the last seven years. The items shown herein represent cost value of the equipment of the Medical Society. As there were no Liabilities outstanding against this equipment, we have shown the entire amount as Net Worth—Capital Fund—in the Balance Sheet.

Under the "Liabilities" section we have listed those accounts, expenses, etc., incurred prior to December 31, 1955, for which statements or accounts were rendered or for which payment was due. "Due Hospital Savings Association", \$87.95, is the amount withheld from employees' salaries under a group plan and is to be paid to the Insurance Company. The \$75.00, "American Medical Association Dues in Escrow", are dues paid to the State Society but which cannot be remitted to the National Society at the time due to diverse dis-

qualifying reasons. The note payable to Dr. J. P. Rousseau represents the sum of money borrowed from Dr. Rousseau on December 11, 1955 and is payable March 10, 1956. The account payable of \$5,600.00 is legal fees due the firm of Smith, Leach, Anderson and Dorsett for legal services rendered in the year 1955. The pay roll taxes, \$72.78 for Social Security and \$505.00 for Withholding, were paid during the course of the audit.

The deferred credit of \$1,280.00 is for payments made on technical exhibits space at the 1956 Convention. This remittance was received in 1955 and will be transferred to the income account in 1956.

The Reserve for Mental Hygiene of \$3,258.07 is a reserve in the process of being built to \$5,000.00 to cover expenses and costs of the said committee in its rehabilitation work. To the balance in this account at January 1, 1955, of \$2,866.22 was added the unexpended Budget Appropriation of \$391.85 in 1955, resulting in the balance at December 31, 1955, of \$3,258.07.

The Reserve for Raymond Randolph Scholarship Fund of \$600.00 represents a reserve for the 1955 Essay Contest Winner, Raymond Randolph, Henderson, N. C. This amount is held in escrow for payment to a college which he chooses upon graduation from high school.

The "Net Worth" section of the Balance Sheet is comprised of two figures: \$74,877.66 being the balance of the Current Operating Fund for the year; and \$17,039.78 representing the balance of Capital Fund.

Analysis of Net Worth—Exhibit "B":

The second statement is an analysis of the changes in Net Worth during the year.

The Current Operating Fund balance was arrived at by subtracting from the balance January 1, 1955, of \$87,608.29, the amount of Net Loss from operations for the current year—\$7,603.36; then deducting therefrom Expenditures for Capital Assets, \$4,735.42 and allocation to Reserve for Mental Hygiene Committee, \$391.85.

The Capital Fund Net Worth balance is derived from adding purchases during the year for Capital Assets in the amount of \$4,735.42 to the balance January 1, 1955, of \$12,436.92 and subtracting sales and charge offs during the year 1955 in the amount of \$132.56.

Statement of Income And Expenses—Exhibit "C":

A statement showing a budget comparison of the income and expenses for the twelve-months period has been shown in Exhibit "C". This statement is, in effect, a statement of operations for the year, and by examination it will be seen that the expenses of \$143,097.80 exceeded the income of \$130,759.02 by \$12,338.78. However, there was included in the expenses \$4,735.42 in Capital Expenditures for equipment. Eliminating these we show loss from operations of \$7,603.36, which has been subtracted from the unexpended balance of the Current Fund and shown in the Net Worth section of the Balance Sheet. The Journal Budget, Public Relations Budget, Annual Sessions (101st) Budget, and Miscellaneous Budget were the contributing factors to this deficit. The excess of \$3,046.00 in the Journal Budget was due mainly to the \$2,249.43 excessive costs of publishing the Journal and the \$1,097.40 excessive costs of publishing the Rosters. The excess of \$1,648.92 in the Public Relations Budget is due mainly to the \$883.96 deficit of Public and Personified Activities which resulted from the unexpected \$1,000.00 contribution to the University of North Carolina Journalism Department. This contribution was

approved by the Executive Council subsequent to the adoption of the 1955 budget. The Rural Health program also contributed to the Public Relation Budget deficit. The \$1,476.59 deficit in the Annual Sessions (101st) Convention Budget was due to the \$421.56 over expenditure for entertainment and the \$2,130.30 excessive costs of Booth Installations and Supplies. Of this over expenditure for Booth Installations and Supplies \$1,478.50 was for entertainment of the exhibitors. This was the first year such entertainment was authorized by the Executive Council. The \$5,108.49 deficit in the Miscellaneous Budget was due to the \$2,856.43 over expenditure for Legal Council and the \$2,684.14 excessive expenditure for Contingency and Emergency. This overage in Contingency and Emergency was due to the \$1,621.00 expenditure for the air condition unit in the Executive office which was approved by the Executive Council May, 1953. Also contributing to this overage was the \$1,370.80 premium on the retirement insurance policy for James T. Barnes and the real estate option which cost \$350.00. In comparison with the budget, actual income was more than the budget anticipated by \$12,121.52. The main items accounting for this are \$8,249.00 more realized than expected from Membership Dues, \$1,600.00 more from Sale of Exhibitors' space, and \$2,275.64 more from local and national Journal Advertisement. Further examination shows that the total actual expenses were \$8,008.80 more than the budget provision.

Cash Receipts And Disbursements—Exhibit "D":

A statement showing in detail the cash receipts and disbursements of the Society during the year under review has been shown in Exhibit "D" which we summarize as follows:

Cash Balance January 1, 1955	\$ 2,649.80
Cash Receipts During the Year	206,436.92
Total Cash Available	\$209,086.72
Less: Disbursements During the Year:	
For Operations	\$135,460.54
To A.M.A.—Dues	61,835.00
For Capital Expenditures	2,764.42
For U. S. Bonds	7,160.00
For Robert Taylor Scholarship Fund	600.00
	207,819.96
Cash Balance At December 31, 1955	\$ 1,266.76

We made a careful analysis of the cash transactions and, where practicable, traced the receipts to their original source. Disbursements for expenses were supported by cancelled checks and invoices issued in the regular course of business. Our examination did not disclose any irregularities in the cash and we believe the funds have been carefully and honestly handled and all accounted for.

General Comments:

A surety bond covering faithful performance of the Secretary-Treasurer, Dr. Millard D. Hill, in the amount of \$50,000.00, is in force, held by the Medical Society and was examined by us. Also in force and examined by us were a Primary Commercial Blanket Honesty Bond in the amount of \$25,000.00; a fire insurance policy covering fire loss on office equipment, books and records in the office of the Executive Secretary, Raleigh, North Carolina, in the amount of \$2,500.00; an Automobile Schedule Liability Policy; and a Standard Workmen's Compensation and Employer's Liability Policy.

We found the records maintained to be in excellent condition; we were extended every courtesy and cooperation during the course of the audit; and we experienced no trouble in making our audit and obtaining the necessary information for this report.

We Hereby Certify that, we have audited the books and records of the Medical Society of the State of North Carolina, Incorporated, for the period from January 1, 1955 to December 31, 1955, and in our opinion the within statements show the correct financial condition of the Society at the close of the year, together with the operating result for the twelve months ended at that time, according to information and explanations given us and as shown by the books, subject to the within qualifications.

Respectfully submitted,

A. T. ALLEN & COMPANY
Certified Public Accountants
By: A. T. Allen
Certified Public Accountant

Raleigh, N. C.
January 27, 1956

Medical Society of the State of North Carolina, Inc.
Raleigh, North Carolina

INDEX

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EXHIBIT "A"—BALANCE SHEET

December 31, 1955

ASSETS

CURRENT OPERATING FUND:

Petty Cash	\$ 50.00
First-Citizens Bank and Trust Company—(Schedule—1)	1,266.76
Accounts Receivable	71.70
Investments In United States Savings and Defense Bonds—At Cost—(Schedule—2)	91,468.00

TOTAL CURRENT OPERATING FUND

\$ 92,856.46

CAPITAL OR NON-OPERATING FUND:

Office Furniture, Fixtures and Equipment — (Schedule—3)	\$ 17,039.78
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TOTAL ASSETS

\$109,896.24

LIABILITIES, RESERVES AND NET WORTH:

LIABILITIES:

Due Hospital Savings Association	\$ 87.95
American Medical Association Dues In Escrow	75.00
Note Payable—Dr. J. P. Rousseau	6,500.00
Account Payable—Legal Fee	5,600.00
Accrued Federal Social Security Tax	72.78
Accrued Federal Withholding Tax	505.00
TOTAL LIABILITIES	\$ 12,840.73

DEFERED CREDITS:

Advance Payment on Technical Exhibit Space at 1956 Convention	1,280.00
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RESERVES:

Reserve For Mental Hygiene Committee	\$ 3,258.07
Reserve For Raymond Randolph Scholarship Fund	600.00

TOTAL RESERVES

3,858.07

NET WORTH:

Current Operating Fund—(Exhibit "B")	\$ 74,877.66
Capital Fund—(Exhibit "B")	17,039.78
TOTAL NET WORTH	91,917.44

TOTAL LIABILITIES, RESERVES AND NET WORTH

\$109,896.24

EXHIBIT "B"

CURRENT OPERATING FUND:

Balance January 1, 1955	\$ 87,608.29
LESS: Net Loss From Operations—Exhibit "C"	7,603.36

Total

\$ 80,004.93

DEDUCT:

Expenditures Made for Capital Fund	\$4,735.42
Allocation to Reserve For Mental Hygiene	391.85
	5,127.27

TOTAL CAPITAL OPERATING FUND 12-31-55—TO EXHIBIT "A"

\$ 74,877.66

CAPITAL FUND:

Balance January 1, 1955	\$ 12,436.92
ADD: Purchases Made During Year Through Current Fund	4,735.42

Total

\$ 17,172.34

LESS: Equipment Sold or Charged Off

132.56

TOTAL CAPITAL FUND 12-31-55—TO EXHIBIT "A"

17,039.78

TOTAL NET WORTH DECEMBER 31, 1955

\$ 91,917.44

EXHIBIT "C"

STATEMENT OF INCOME AND EXPENSES 12 Months Ended December 31, 1955

INCOME:

	Budget Provision	Actual	Difference
Membership Dues—Current and Prior Years	\$ 88,000.00	\$ 96,249.00	\$ 8,249.00
Interest on Government Bonds	287.50	218.75	68.75
Sale of Exhibitors Space	8,000.00	9,600.00	1,600.00
Journal Advertisement—Local	()	3,409.80	
Journal Advertisement—National	21,000.00	19,865.84	2,275.64
Journal Subscriptions	()	188.17	
Sale of Rosters	300.00	374.45	262.62
Authors' Contribution to Cost of Cuts	300.00	204.20	95.80
Commission (1%) From A.M.A. For Collection of Dues	550.00	618.81	118.81
Revenue Unexpected	250.00	30.00	220.00
TOTAL INCOME	\$118,687.50	\$130,759.02	\$ 12,121.52

EXPENSES:

Executive Budget:

A-1 Expense—President	\$ 1,500.00	\$ 834.67	\$ 665.33
A-2 Salary—Secretary-Treasurer	2,640.00	2,640.00	—0—
A-3 Travel—Secretary-Treasurer	1,200.00	1,200.00	—0—
A-4 Salary—Executive Secretary	9,000.00	9,000.00	—0—
A-5 Travel—Executive Secretary	3,100.00	3,099.96	.04
A-6 Clerical Assistants Executive Office	9,000.00	8,216.00	784.00
A-7 Equipment—Executive Office	1,200.00	1,586.77	386.77
A-8 Office Expense—Executive Office	6,000.00	5,740.79	259.21
A-9 Bonding	850.00	843.75	6.25
A-10 Audit	300.00	300.00	—0—
A-11 Taxes—Pay roll	305.00	304.83	.17
A-12 Insurance	100.00	161.26	61.26
A-13 Membership Record System	100.00	17.20	82.80
A-14 Publications, Reports and Executive Aids	150.00	206.55	56.56
TOTAL EXECUTIVE BUDGET	\$ 35,445.00	\$ 34,151.78	\$ 1,293.22

Journal Budget:

B-1 Publication of Journal	\$ 24,000.00	\$ 26,249.43	\$ 2,249.43
B-2 Cuts for Journal	500.00	698.59	198.59
B-3 Salary of Editor	2,310.00	2,310.00	—0—

B-4 Salary of Assistant Editor	2,640.00	2,640.00	—0—	E-16 Travel — Health Education Consultant	1,800.00	2,187.41	387.41
B-5 Office Expense—Editorial Office	400.00	310.25	89.75	E-17 Clerical Help	1,200.00	1,600.39	400.39
B-6 Office Expense—Business Manager	300.00	149.56	150.44	E-18 Rural Health Conference	400.00	581.86	181.86
B-7 Equipment—Business Manager's Office	200.00	170.77	29.23	E-19 General Expenses—Rural Health	700.00	1,464.35	764.35
B-8 Travel—For Journal	200.00	—0—	200.00	Total Public Relations Budget	\$ 31,818.00	\$ 33,466.92	\$ 1,648.92
B-9 Taxes—Payroll	99.00	99.00	—0—	Annual Sessions (101st) Convention Budget:			
B-10 Refunds From Subscriptions, etc.	30.00	—0—	30.00	F-1 Programs	\$ 1,400.00	\$ 1,088.10	\$ 311.90
B-11 Publication of Rosters	1,600.00	2,697.40	1,097.40	F-2 Hotel Convention Expenses	1,700.00	1,870.24	170.24
Total Journal Budget	\$ 32,279.00	\$ 35,325.00	\$ 3,046.00	F-3 Publicity Promotion and Reporting	250.00	267.24	17.24
Intra-Functional Activity Budget:				F-4 Entertainment	400.00	821.56	421.56
C-1 Executive Council; Travel of Councilors	\$ 2,750.00	\$ 1,804.60	\$ 945.40	F-5 Orchestra and Floor Entertainment	2,500.00	2,512.00	12.00
C-2 Expenses—Councilors	1,000.00	325.10	674.90	F-6 Guest Speakers and Honorarium	400.00	772.50	372.50
C-3 Expenses—Legislative Committee	3,000.00	3,000.00	—0—	F-7 Banquet Speaker	200.00	—0—	200.00
C-4 Expenses—Public Relations Committee	350.00	417.00	67.00	F-8 Electric Amplification	200.00	120.00	80.00
C-5 Expenses—Maternal Welfare Committee	2,600.00	2,600.00	—0—	F-9 Booth Installations and Supplies	3,500.00	5,630.30	2,130.30
C-6 Expenses—Rural Health Committee	200.00	—0—	200.00	F-10 Projection Expense	500.00	344.40	155.60
C-7 Expenses—Cancer Committee	300.00	315.00	15.00	F-11 Badges	400.00	—0—	400.00
C-8 Expenses—Convention Arrangement Committee	300.00	—0—	300.00	F-12 Transaction Reporting Service	2,000.00	1,939.75	60.25
C-9 Expenses—Scientific Exhibit Committee and Audio Visual Program	200.00	262.35	62.35	F-13 Rentals for Sections and Exhibits	800.00	360.50	439.50
C-10 Expenses—Committee on Mental Hygiene	500.00	108.15	391.85	Total Annual Sessions (101st) Convention Budget	\$ 14,250.00	\$ 15,726.59	\$ 1,476.59
C-11 Committee on Coroner System	250.00	13.00	237.00	Miscellaneous Budget:			
C-12 Expenses—Committee on Mediation	800.00	1,716.81	916.81	G-1 Previous Accounts Payable	\$ 100.00	\$ —0—	\$ 100.00
C-13 Expenses—Committees in General	1,200.00	1,633.57	433.57	G-2 Refunds	250.00	3.00	247.00
C-14 Expenses—Committee on Anesthesia Mortality	400.00	400.00	—0—	G-3 Retainer Fees for Legal Council	2,000.00	4,856.43	2,856.43
C-15 Expenses—Committee on Occupational Health	262.00	84.34	177.66	G-4 Reporting (Executive Council, etc.)	1,200.00	761.21	438.79
Total Intra-Functional Activity Budget	\$ 14,112.00	\$ 12,679.92	\$ 1,432.08	G-5 President's Jewel	60.00	44.56	15.44
Extra-Functional Activity Budget:				G-6 General Practitioner of Year and 50 Year Club	150.00	355.49	205.49
D-1 Expenses of A.M.A. Delegates	1,200.00	\$ 1,086.00	\$ 114.00	G-7 Expenses—Sections	125.00	288.66	163.66
D-2 Conference Dues	300.00	135.00	165.00	G-8 Contingency and Emergency	1,000.00	3,684.14	2,684.14
D-3 Woman's Auxiliary	500.00	533.10	33.10	Total Miscellaneous Budget	\$ 4,885.00	\$ 9,993.49	\$ 5,108.49
D-4 Expenses of Delegates to A.M.A. Regional Conference	300.00	—0—	300.00	TOTAL EXPENSES	\$135,089.00	\$143,097.80	\$ 8,008.80
Total Extra-Functional Activity Budget	\$ 2,300.00	\$ 1,754.10	\$ 545.90	SUMMARY:			
Public Relations Budget:				TOTAL INCOME			\$130,759.02
E-1 Salary—Assistant for Public Relations	\$ 6,600.00	\$ 6,800.00	\$ 200.00	LESS: EXPENSES:			
E-2 Travel—Assistant for Public Relations	2,100.00	1,504.51	595.49	Executive Budget		\$ 34,151.78	
E-3 Travel—Committee Chairman	300.00	—0—	300.00	Journal Budget		35,325.00	
E-4 Clerical Assistants—Public Relations	2,500.00	2,934.00	434.00	Intra-Functional Activity Budget		12,679.92	
E-5 Equipment—Public Relations Office	1,000.00	1,006.88	6.88	Extra-Functional Activity Budget		1,754.10	
E-6 Office Expense—Public Relations Office	2,500.00	2,556.66	56.66	Public Relations Program Budget		33,466.92	
E-7 Taxes—Payroll	218.00	254.97	36.97	Annual Sessions (101st) Convention Budget		15,726.59	
E-8 Publications and Executive Aids	200.00	100.32	99.68	Miscellaneous Budget		9,993.49	143,097.80
E-9 Radio-Motion Picture Production, Distribution and Printing	900.00	171.67	728.33	EXCESS OF EXPENSES OVER INCOME		\$ 12,338.78	
E-10 Production and Distribution of Educational Periodicals and Press Releases	1,500.00	1,628.95	128.95	LESS: Capital Expenditures From Current Fund		4,735.42	
E-11 News and Press Releases	2,000.00	2,509.00	509.00	NET LOSS FROM OPERATIONS—TO EXHIBIT "B"		\$ 7,603.36	
E-12 Public and Personalized Activities	800.00	1,683.96	883.96	EXHIBIT "D"			
E-13 High School Essay Contest	800.00	840.00	40.46	CASH RECEIPTS AND DISBURSEMENTS			
E-14 Collateral Public Relations With Other Committee Activity	800.00	706.53	93.47	12 Months Ended December 31, 1955			
E-15 Salary — Health Education Consultant	5,500.00	4,935.00	565.00	RECEIPTS:			
				CASH RECEIPTS FROM REGULAR OPERATIONS:			
				Membership Dues—Current and Prior Years		\$ 96,299.00	
				Medical Journal Advertisement—Local		3,508.83	
				Medical Journal Advertisement—National		19,865.84	
				Sale of Exhibition Space at 1955 State Convention		7,680.00	
				Sale of Exhibition Space at 1956 State Convention—Escrow		1,630.00	
				Medical Journal Subscriptions and Sales		193.17	
				Sale of Rosters		374.45	
				Interest on United States Government Bonds		218.75	
				Over Collection of Dues, Later Refunded		580.75	
				Commission (1%) from A.M.A. For Collecting Dues		618.81	

Reimbursed Costs of Engraving Plates	204.20
Hotel Room — Convention John R. Bender	53.79
Miscellaneous Refunds — A-8 (Office Expense)	62.10
Miscellaneous Refunds — E-18 (Rural Health Conference)	100.00
Miscellaneous Refunds — F-2 (Hotel Convention Expense)	17.73
Miscellaneous Refunds — F-9 (Booth Installation)	52.00
TOTAL CASH RECEIVED FROM REGULAR OPERATIONS	\$131,109.42

AMERICAN MEDICAL ASSOCIATION REGULAR DUES COLLECTED	61,860.00
AMERICAN MEDICAL ASSOCIATION DUES IN ESCROW	437.60
RECEIPTS FROM UNITED STATES SAVINGS BONDS MATURED	6,500.00
RECEIPTS FROM SALE OF CAPITAL ASSETS	30.00
MONEY BORROWED FROM DR. J. P. ROUSSEAU	6,500.00
TOTAL RECEIPTS	\$206,436.92

CASH BALANCE JANUARY 1, 1955:	
First-Citizens Bank and Trust Co., Raleigh N. C.	2,649.80
TOTAL TO BE ACCOUNTED FOR	\$209,086.72

DISBURSEMENTS: DISBURSEMENTS FOR CURRENT OPERATIONS:

Expenditures—Executive Budget	\$ 34,252.78	
Less: Capital Expenditures — Office Equipment	1,586.77	\$ 32,666.01
Expenditures—Journal Budget	\$ 35,316.75	
Less: Capital Expenditures — Office Equipment	170.77	35,145.98
Expenditures—Intra-Functional Activity Budget		10,981.69
Expenditures—Extra-Functional Activity Budget		1,754.10
Expenditures — Public Relations Program Budget	\$ 33,350.48	
Less: Capital Expenditures—Equipment	1,006.88	32,343.60
Expenditures—Annual Sessions (101st) Convention Budget	15,409.54	
Expenditures—Miscellaneous Budget	6,027.90	
Refunds of Dues Over Collected and Not Accepted	597.25	
Refunds of Dues Previously Accepted	362.50	
Refunds of State Society Dues	50.00	
Refunds of Technical Exhibit Receipts	80.00	
Payment of Account Payable	10.00	
Refund of Subscription	5.00	
Accrued Pay Roll Taxes at 12-31-54	521.82	
Accrued Hospital Insurance at 12-31-54	80.70	
Hotel Room — Convention — John R. Bender	53.79	
Total	\$136,089.88	
LESS: Deductions From Wages—Unpaid at 12-31-55		
Pay Roll Taxes	\$ 541.39	
Hospital Insurance	87.95	629.34
TOTAL DISBURSEMENTS FOR CURRENT OPERATIONS		\$135,460.54

PAYMENT TO AMERICAN MEDICAL ASSOCIATION — REGULAR DUES COLLECTED	61,835.00
EXPENDITURES FOR CAPITAL ASSETS	2,764.42
PURCHASE OF UNITED STATES GOVERNMENT BONDS	7,160.00
ROBERT TAYLOR SCHOLARSHIP FUND	600.00
TOTAL DISBURSEMENTS	\$207,819.96

CASH BALANCE DECEMBER 31, 1955:	
First-Citizen Bank and Trust Co., Raleigh, N. C.	1,266.76
TOTAL ACCOUNTED FOR	\$209,086.72

SCHEDULE—1 RECONCILIATION OF BANK ACCOUNT December 31, 1955 FIRST-CITIZENS BANK AND TRUST COMPANY, RALEIGH, N. C.:

Balance Per Bank Statement				\$ 7,806.35
LESS: Outstanding Checks:				
No. 1146	\$ 3.00	No. 5145	\$ 2,792.24	
2733	5.00	5146	10.00	
3664	25.00	5147	1.85	
4494	2.00	5148	8.11	
4579	3.50	5149	3.00	
5103	437.50	5150	94.70	
5109	185.60	5151	121.20	
5115	25.00	5152	239.50	
5119	117.45	5153	15.14	
5120	233.23	5154	11.33	
5121	108.15	5155	32.70	
5122	184.15	5156	42.53	
5123	107.89	5157	6.00	
5124	48.62	5158	23.39	
5125	179.44	5159	125.00	
5126	76.11	5160	3.65	
5128	18.90	5162	205.15	
5129	37.66	5163	1.00	
5130	8.50	5164	14.06	
5131	46.98	5165	48.02	
5132	8.89	5166	4.64	
5133	12.04	5167	6.59	
5134	14.00	5168	85.88	
5135	14.00	5169	8.66	
5136	45.20	5170	5.66	
5137	28.00	5171	4.50	
5138	53.40	5172	9.12	
5139	208.50	5173	2.74	
5140	13.49	5174	4.29	
5141	12.43	5175	.26	
5142	125.06	5176	2.10	
5143	50.27	5177	15.60	
5144	66.33	5178	118.69	6,539.59

BALANCE PER BOOKS—TO EXHIBIT "A" \$ 1,266.76

SCHEDULE—2 INVESTMENT IN UNITED STATES BONDS December 31, 1955

	Date of Issue	Date of Maturity	Par Value At Maturity	Cost
DEFENSE BONDS—SERIES "F":				
No. X356002F	4- 1-50	4- 1-62	\$ 10,000.00	\$ 7,400.00
X356003F	4- 1-50	4- 1-62	10,000.00	7,400.00
X356004F	4- 1-50	4- 1-62	10,000.00	7,400.00
M1644801F	4- 1-50	4- 1-62	1,000.00	740.00
M1644802F	4- 1-50	4- 1-62	1,000.00	740.00
M1644803F	4- 1-50	4- 1-62	1,000.00	740.00
M1644804F	4- 1-50	4- 1-62	1,000.00	740.00
X356930F	4- 1-51	4- 1-63	10,000.00	7,400.00
X356929F	4- 1-51	4- 1-63	10,000.00	7,400.00
X472186F	3-31-52	3-31-64	10,000.00	7,400.00
V307206F	3-31-52	3-31-64	5,000.00	3,700.00
M1804761F	3-31-52	3-31-64	1,000.00	740.00
C1855657F	3-31-52	3-31-64	100.00	74.00
C1855656F	3-31-52	3-31-64	100.00	74.00
SAVINGS BONDS—SERIES "G":				
No. M2365967G	2- 1-44	2- 1-56	1,000.00	1,000.00
M2700601G	4- 1-44	4- 1-56	1,000.00	1,000.00
M2700600G	4- 1-44	4- 1-56	1,000.00	1,000.00
M2772895G	6- 1-44	6- 1-56	1,000.00	1,000.00
M2772896G	6- 1-44	6- 1-56	1,000.00	1,000.00
SAVINGS BONDS—SERIES "J":				
No. V12902J	3-26-53	3-26-65	5,000.00	3,600.00
X734J	3-26-53	3-26-65	10,000.00	7,200.00
X14545J	2-26-54	2-26-66	10,000.00	7,200.00
X14546J	2-26-54	2-26-66	10,000.00	7,200.00
M35509J	2-26-54	2-26-66	1,000.00	720.00
M35510J	2-26-54	2-26-66	1,000.00	720.00
M35511J	2-26-54	2-26-66	1,000.00	720.00
M94351J	1- 5-55	1- 5-67	1,000.00	720.00
M94352J	1- 5-55	1- 5-67	1,000.00	720.00
M94353J	1- 5-55	1- 5-67	1,000.00	720.00
SAVINGS BONDS—SERIES "K":				
No. V27281K	9-12-55	9-12-67	5,000.00	5,000.00

TOTAL PAR VALUE AT MATURITY	\$121,200.00
TOTAL COST VALUE AT DATE OF ACQUISITION—TO EXHIBIT "A"	\$ 91,468.00

SCHEDULE—3 SCHEDULE OF CAPITAL ASSETS December 31, 1955

EXECUTIVE OFFICE:	
Wooden File Case—Letter Size	\$ 21.66
Typewriter Desk	25.00
Steel Office Safe	150.00
Steel File Case—Letter Size	20.00
Four Steel Card Files	20.00
Office Chair	35.20
One Desk	62.55

Steel Filing Cabinet	24.50
Office Desk	47.95
Letter File—Two Drawer	29.46
Steel Filing Cabinet	71.75
Office Chairs	40.00
Office Desk	87.29
Office Equipment—Miscellaneous	1,149.39
One (1) Telephone Table	15.45
Two Pairs 12"x38" C. S. Vents and Brackets	8.77
One (1) Welch Fan	40.80
One (1) Emerson Fan	24.67
One (1) Desk Lamp	10.26
Two (2) Master Model Audographs and Attachments	725.67
One (1) Map of Greater Carolinas	37.50
Two (2) Double Files 3"x5"	11.86
One (1) Remington Electric DeLuxe Typewriter	337.90
Three (3) Pendaflex Frames	5.57
Two (2) Grey Steel Cabinets	103.00
Three (3) Transfer Files	11.89
One (1) Spec. D. Outfit File	7.25
Two (2) Legal Filing Cabinets	19.90
One (1) Filing Shelf	2.50
Plywood Carrying Case for Audograph Map Framel	17.00
Charter Framed	3.61
Cash Box	2.57
Steel Desk	2.79
Three (3) Desk Trays with Stackers	158.98
Waste Basket	8.57
Large Chair Mat	1.40
Glass Desk Top	9.27
Stenograph and Tripod	11.68
Magic Mailer	100.70
Four Drawer Filing Cabinet	6.64
Four Pendaflex Steel Frames	78.03
Remington Electric Typewriter	7.42
Postal Scale	430.15
Numbering Machine	6.50
Filing Stool	14.88
Bookcase	11.23
Remington Rand Electric Adding Machine	63.86
Metal Storage Cabinet	215.01
Metal Filing Cabinet	78.28
Two (2) Cabinet Shelves	92.76
Metal Cash Box	10.30
Pro Rata Share of Cost of Mimeograph Machine	2.32
Typewriter Table	337.47
Metal Correspondence Separator	21.00
Metal File and Sections	6.18
Two (2) Typewriters—Large Type	68.55
Kardix File and Parts	321.23
Catalogue Case	1,842.36
Metal File and Frames	20.00
Electric Typewriter	93.07
Secretarial Foot Control	477.00
Three (3) Transfer Files	25.75
Junior Pendaflex File	16.23
Book Case Section	22.87
Remington Electric Typewriter	26.25
Swivel Chair and Arm Chair	290.30
Audiograph Converter	74.48
Pendaflex File	28.84
Used Desk and (2) Files	5.88
De Jur Camera With Flash Attachment and Case	281.43
Welsh Circular	100.44
Audiograph Machine—Used	40.00
Flight Bag	300.00
Three (3) Box Files	38.31
Portable Lectern	9.42
Metal File	29.93
Checkwriter—Paymaster	114.33
Transcriber	101.48
Dictating Machine	328.15
Desk and Chair	429.08
Supply Cabinet Shelves	268.45
Pro Rata Share of Cost of Imperial Safe KD "60"	25.35
Air Conditioning Equipment—Office	290.00
	1,621.00

TOTAL EXECUTIVE OFFICE \$ 12,136.52

PUBLIC RELATIONS OFFICE:

Four (4) Aluminum Desk Trays with Supports	\$ 9.00
Steel Costumer	14.20
Postal Scale	4.00
Cash Box	1.50
Supply Cabinet	37.00
Two (2) Waste Baskets	7.00
Metal Executive Desk	112.60
Executive Chair	48.80
Two (2) Side Arm Chairs	60.40
Metal Secretary Desk	136.40
Secretary Chair	30.20
Storage Cabinet	37.00
Two (2) Chair Mats	12.90
Stapler	4.95

Pencil Sharpener	1.95
Punch	3.15
Metal Letter File With Lock	61.60
Storage Cabinet	37.00
Royal Typewriter	133.31
Two (2) Electric Fans	63.29
Hinge Top Card File	1.60
Four Drawer Metal File	69.49
Two Drawer Metal File With Lock and Base	18.36
Supply Cabinet	75.00
Two (2) Desk Trays and Stacks	4.64
Metal Storage Cabinet	57.29
Pro Rata Share of Cost Mimeograph Machine	508.53
Pendaflex Frames	4.64
Folder Machine and A. B. Dick Stand	397.88
Used Elliott Addressograph	123.83
Two (2) Telephone List Finders	6.06
Pendaflex Frame	4.50
Verifax Printer Type I	247.20
Used Projector	153.43
Model DIS Screen	32.45
Record Player	101.25
Microphone and Stand	19.40
Projector With Case	94.47
Lectern Mike	56.85
Display Equipment	31.74
Remington Electric Typewriter	430.55
Two (2) Cameras and Flash	278.48
Film Holders and Adapters	19.00
Metal File	95.79

TOTAL PUBLIC RELATIONS OFFICE \$ 3,648.68

JOURNAL BUSINESS MANAGER'S OFFICE:

Steel File and Frames	\$ 88.27
Pro Rata Share of Cost of Imperial Safe KD "60"	170.77

TOTAL JOURNAL BUSINESS MANAGER'S
OFFICE 259.04

RURAL HEALTH AND MEDICAL CARE

COMMITTEE:	
Masco Tape Recorder	\$ 159.18
One (1) Desk	185.40
One (1) Steel File and Trays	121.29
One (1) Soundsciber	150.00

TOTAL RURAL HEALTH AND MED-
ICAL CARE COMMITTEE 615.87

ANNUAL SESSIONS CONVENTION:

Portable Lectern 29.67

REAL ESTATE:

Option—Land on Durham-Raleigh Highway 350.00

TOTAL CAPITAL ASSETS—TO EXHIBIT "A" \$ 17,039.78

Dr. Hill: I move that this be adopted with the auditor's report, the report of A. T. Allen & Company.

[The motion was seconded by Dr. Dixon.]

Speaker Murphy: Is there any discussion?

[The motion was put to a vote and carried.]

Speaker Murphy: We now come to the point when we will hear the report of the genius of the organization and a paragon of patience, our Executive Secretary, Mr. James T. Barnes. [Applause]

Mr. Barnes:

REPORT OF THE EXECUTIVE SECRETARY MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

Mr. Speaker, President Rousseau, Members of the House of Delegates, distinguished guests and friends.

I shall not labor you long. Quoting from the Prophet Micah, WHAT DOETH THE LORD REQUIRE OF ME, BUT TO DO JUSTLY, AND TO LOVE MERCY AND TO WALK HUMBLY WITH MY GOD?

Having done these things, one has contributed a practical life, a good life and assured his own mind a deserved peace. While this year has been an arduous one for me—I have really much loved my labors. In so doing I stand before you today fully accounted. "If you have need for fear of doing wrong you will do no wrong." Somehow that bit of Biblical expression has been a guide for me and it

has constituted a part of my personal alert as I have gone about the business of this Society over the past ten years.

When my duty has been defined for me I have gone about doing it. I leave it to the judgment of the presidents and the Council how well such duty has been done.

During this year this Society has reached the highest peak of activity which it has undertaken in all its history. Challenges have never been greater, nor of a diverse nature. On all fronts tolerances have been in the balance and these tolerances have seemed to dwain, dwindle and diminish with the confusions which attend the great departures which are undertaken in this day and time. Medicine, a traditional science with old and valued character and reserves, has constantly been under challenge. Some of my duties have involved meeting these on all fronts and in some manner I think I see, away over the horizon, a gleam of hope—a hope which I believe will connote change, but rather a change with many parts of the old and valued things of this great body of knowledge—this great body of human art—which we call medicine, preserved to humankind as one of the blessed things in the experience of man. To be a part of all this is stimulating; to have a befitting knowledge and experience in administrative leadership which, even in a small way, contributes to the course which medicine takes at this time is a soul satisfying realization. Under proper circumstances, and permission, one would hope to be able to carry on usefully in this field. To do so, tolerances may well be recognized, for surely the "body groweth old"; "the eye groweth dim"; and "the hand shaketh with palsy", which is to say as we pass the years we shall have less power to accomplish things which youth must undertake and do, knowledge notwithstanding.

This year has seen the service of a wise and willing President. No man ever gave himself so completely to the cause of this Society and to the causes of medicine, than has Doctor James Parks Rousseau. He has reached a high degree of medical statesmanship. No sacrifice of time, physical discomfort or economic means has deterred him from his post of duty. Under this man of good will, keen intellect, and devotion to medicine and fine sense of understanding of men everywhere, it has been a real pleasure to "take orders" which he was not prone to give and to perform the works which his function impelled him to assign. As a fellow traveler, I have enjoyed this warm and friendly soul. May God bless his great efforts for this Society.

I cannot close this report without due and significant acknowledgment that, except for the sacrifices of an intelligent and efficient staff, the years' work would not have been accomplished. They deserve your best considerations and they shall have mine. I can report the fullest fealty to duty on the part of the staff as it now stands and it is my hope its intactness can be substantiated here for such is my desire.

President Rousseau, and other officers, will have narrated much of the accomplishments for the year and perhaps set some courses for us in the year to come. Whatever their evaluations, we shall, if permitted, embark again upon the retenuues which lead again to this annual mark of this Society's progress. We hope that our preparations for the event of this convention will facilitate your business at hand, provide the setting for the sound and tolerant projection of future affairs, and perhaps no little enjoyment of some things that may not characterize future programs for a long time.

The following constitutes a statistical accounting of the year of activities:

A. Incoming items of processible mail	16,957
B. Letters, personal and general, dispatched	31,754
C. Public relations Bulletins dispatched	36,048
D. Total mail items prepared and dispatched	67,902
E. Telephoned communications, local, prepaid and toll	1,771
F. Telegrams received and dispatched	455
G. Reports, formal, miscellaneous, agenda, transmittals and memoranda	227
H. Review of literature and reports	1,027
I. Personal conferences	628
J. Meetings attended	45
K. Public speeches	16
L. Releases to Press	2,820
M. Releases to Radio	189

There was a gain of membership over 1955 of 104. The total at December 1, 1955 stood at 3,004. It reached 3,013. The mark was the highest in the history of the society. For the year 1956 the prospects are equally good; as of April 25, 1956 there were 2,679 members in good standing for the year 1956 as against 2,749 on the same date a year ago, a loss of 70. Somehow, we expect to gain sufficiently to reach the 3,200 goal for 1956.

We made a great effort to arrive at a balanced budget for the year past despite the authorization of an unbalanced budget. We just about accomplished that, except that authorized expenditures of expedient nature within the year were added; so that, for the first year in eight, expenditures slightly exceeded revenues and also for the first time in eight years no addition was placed in reserve. However the reserve account has not been disturbed and considering accurement of long useful equipment (capital assets) during the year the budget was in realistic balance.

The Committee work has been superior to any year in this Society's history. So great is the burden of committee work that surely some re-dividing must be undertaken to maintain the present strenuous liaison. Let us mark this as an important objective which surely you must work toward solution. Our pledge of last year toward committee work was over-extended which the officers properly recognize.

Consistently the physician placement service grows in activity. This is essential in a growing state, characterized by many contingencies on adequate medical personnel, and we are pleased at the many indications from physicians seeking help in placement, and from communities, that ours is an outstanding and effective placement service. The aid of the Health Consultant, Mrs. Boutwell, and the advice of the Committee on Rural Health have been of much significance in these efforts.

Mr. William Hilliard, now affectionately "Bill" to most of you, will report on Public Relations. The majority of his assignments are in that field, but he has been of increasing assistance on all lines of headquarters activities which have expanded under the leadership of this Society.

The North Carolina Medical Journal still stands as the real media of medicine in North Carolina and has deep respect among the states and even abroad. It is characterized by excellent editorials, essays and format—the latter having been significantly improved this year. Advertising increases are absorbed by increased production costs which encompass paper cost rises and increased labor costs. The twain is difficult to meet and when the divergent ratio of cost to income expands we may have to undertake departures in management in

order to make the twain. This you will understand and approve we feel sure. I have the duty to report the Journal Budget:

1955:

Journal Budget:	
Publication	\$27,000.00
Cuts	500.00
Salaries, editorial	5,910.00
Office expense, editorial	400.00
Office expense, managerial	300.00
Equipment, managerial	200.00
Travel expense Journal Business—	
local and national	200.00
Taxes	99.00
Refunds	30.00
Total Journal Budget	\$34,639.00

Receipts:	
Medical Journal Advertising	\$23,275.64
Subscriptions and sales	562.62
Sales of Rosters	
Reimbursed cost of cuts	204.20
Appropriated by the Society	10,596.54
Total Receipts	\$34,639.00

Actual Disbursements:	
Publication	\$26,249.43
Cuts	698.59
Editorial salaries	4,950.00
Office Expense, editorial	310.25
Office expense, Business Manager	149.56
Equipment, Business Manager	177.77
Travel—For Journal	nil
Taxes—(Social Security)	99.00
Refunds	nil

Total Actual Disbursements\$32,627.61

Expenditures:

In excess of budget	\$ nil
Receipts above expenditures	2,011.39

Finally this constitutes my terminal report for the period of a decade. That's a long time. Assurances of the moment are appreciated. That we shall find the physical strengths and presence of good mind and good will to carry on is the prayer of this moment. For a knowledge and will to grow more gracious in the sight of my Lord, and you, is my devout wish and my devotion. May your blessings be in the same vein.

Respectfully submitted,
James T. Barnes
Executive Secretary

Raleigh, N. C.
April 30, 1956

Speaker Murphy: Is there a motion that this excellent report be received?

Dr. Norris Smith: I so move.
[The motion was seconded by several.]

Speaker Murphy: Is there discussion?
[The motion was put to a vote and carried.]

Speaker Murphy: Mr. Barnes has a very efficient executive assistant who is our Director of Public Relations. Mr. William N. Hilliard will now give his report.

**MEDICAL SOCIETY OF THE STATE OF
NORTH CAROLINA
PUBLIC RELATIONS ANNUAL REPORT
of
William N. Hilliard
Executive Assistant
For Public Relations**

Mr. Speaker . . . President Rousseau . . . members of the House of Delegates . . . Honored Guests . . . it is my sincere hope that my activities during the past year in the field of public relations have

been a continued contribution to the development of what is best for the Society, under the direction of the Committee on Public Relations, of which Dr. Amos N. Johnson is chairman. Also on the Committee are Dr. John Rhodes and Dr. Fred K. Garvey, with seven others as consultants from various parts of the state.

These three committee members along with the consultants to the Committee on Public Relations have exerted many hours in the consideration and formulation of the Society's policies with regard to Public Relations.

I sincerely feel that the wise guidance received from the Executive Secretary, Mr. James T. Barnes, has been instrumental in channeling the efforts of your Public Relations' Assistant in the right direction.

Your Public Relations Committee has been particularly interested over the past year in acquainting medical students, interns and residents with the manifold problems of organized medicine thereby bolstering the public relations awareness of the physicians at an early stage. The Committee is concerned with instilling anew a concern for the importance of the "art" of the practice of medicine beyond the scientific aspects of medicine which are so adequately offered by our medical schools. Indications are that much is being done in this area, however, even more will undoubtedly be done in this field in the future as indicated by a cooperative discussion between the committee and the Deans of North Carolina's three medical schools on January 15, 1956. The Committee has offered its assistance in obtaining Medical Society speakers for benefit of the students, interns and residents on topics under the three principal areas: the art of the practice of medicine, public relations and the economics of medical practice.

The Annual Public Relations Conference was held this year on the campus of two of the medical schools, and thanks should go to the Deans of the schools for their fine cooperation and encouragement to their students and staff to attend the conference held in Winston-Salem and the one held in Durham. Proceedings of the conference will be distributed in the near future to those registering at the conferences and to County Society Chairmen of Public Relations Committees.

A project undertaken during the term of last year's committee on Public Relations has been continued . . . that of studying the relationships between the press and the medical profession. This has been undertaken by the University of North Carolina School of Journalism in cooperation with the Public Relations Committee and is now nearing completion. The physicians who have received these questionnaires have been particularly cooperative in returning their comments to the survey team which certainly should indicate intense interest in this type of survey. An evaluation of this study is anticipated within a few weeks.

Two hundred forty-one complimentary one year renewal subscriptions to the magazine Today's Health, were sent to the Governor of North Carolina, the Council of State, Supreme and Superior Court Judges, members of the North Carolina General Assembly and to national members of Congress from North Carolina. 142 complimentary one year subscriptions to this same magazine were sent, in conjunction with the Committee on Rural Health, to the County 4-H King and Queen of Health in each so designating a King and Queen of Health from their 4-H Club.

Miss Shirley Wilds of Mars Hill, won the annual High School Essay Contest sponsored and conducted by the Public Relations Committee in cooperation with the Association of American Phy-

sicians and Surgeons. She will present her winning essay tomorrow, and will receive a \$600 education scholarship to any school of her choice approved by the Southern Association of colleges and secondary schools. The three top essays so adjudged in the statewide contest have been forwarded for consideration in the national contest. Four North Carolina students have placed in the national ranking of this contest during the last five years which is certainly indicative of the caliber of students attracted to this program sponsored by the State Medical Society.

One of the most important phases of medical public relations is the development of community services. These may vary according to the size of the county medical society, but it is our sincere belief that herein lies an area where the public relations services of the headquarters office of the State Medical Society can well be utilized. The services of the headquarters staff are certainly available to you in the planning of any such programs you may wish to adopt or consider.

A Medical Society State Fair Exhibit was sponsored again last October by the Committee—offering fairgoers a chance to get their blood typed free of charge. Several hundred persons took advantage of the opportunity and received "pocket-book type" identification cards which included their blood group and Rh type. The educational portion of the exhibit depicted the small amounts of money spent for medical care as compared with non-medical expenditures.

The committee purchased several films appropriate for television and civic club programs and these along with several films on loan from the AMA have been scheduled over the ten or twelve television outlets in North Carolina. These films are still available for Civic Club programs sponsored by County Medical Societies.

We have continued to serve as a distribution point for North Carolina of all AMA transcribed radio programs, a large number of these being arranged with local radio stations and in cooperation with local medical societies. These include programs on a variety of topics on everyday health problems and could well be utilized to a greater extent, by the county medical societies. It has been my experience that many radio stations are eager for this type of well presented authentic public service programs.

We have attempted to coordinate the publicity efforts of several Society undertakings such as the state and regional Rural Health Conferences and several other such programs, the American Medical Education Foundation to mention but one example.

The Public Relations Bulletin has continued on a monthly basis with efforts being made to increase its newsworthiness as an organ of the Society for expeditiously reaching the membership with messages and information of importance. Activities of County and District Medical Societies will continue to receive an important share of attention in this media.

The fact that what Americans think of the Medical Profession is an important segment of Public Relations is supported by a recent nationwide survey conducted for the AMA by an independent research firm. The survey reveals that people have a higher opinion of doctors than doctors have of themselves. Dr. George F. Lull, Secretary and General Manager of the AMA has this to say about the survey . . . "Although physicians as individuals were given a public vote of confidence, the survey also indicates a wide divergence of feeling about 'my own doctor' and 'doctors in general.' For this reason, he adds, suggestions offered by the public

can well be taken to heart by each member of the profession to help prove to the public that **most doctors do make house calls, do keep their fees within reason and do have a personal interest in their patients.**" Copies of this survey may be obtained for County Public Relations Committee members through the headquarters office. I respectfully suggest that County Public Relations Committee members study and report to their respective societies on the results of this important and revealing survey.

The Committee has discussed the possibility of developing a folder of materials for new members of the society which would serve to assist in the indoctrination process. Each county society could well consider this project on a local level, the development of an indoctrination leaflet for new members, or an apprenticeship program which would "break the ice" so to speak for members new to that area, giving them benefit of a knowledge of some of the local practices procedures.

The County Medical Society is certainly the backbone in representing American medicine and the number one local health resource for assistance in planning and evaluation of community health activities, needs and problems. Every effort should be made to make local leaders and civic groups aware of the availability of physicians for assistance in community health improvement programs.

To you, the members of a profession with such a tradition of accomplishment and record of progress, I admit it ill becomes a practitioner of the arts of public communication to attempt to tell you how your programs should best be promoted. However, I only offer the suggestion that those of us who call ourselves public relations consultants represent a business which is basically one of communication with people. The policies must be your own, ours is only that of conveying your message.

Statistical reference is made to an attached tabulation with regard to the public relations mailing, speeches and personal contacts:

Mail received	1,434
Mailed	5,372
Radio Transcriptions	14
Releases	2,820
Pamphlets	479
Radio Scripts	175
Films	10
Notices of High School Essay Contest	2,000
High School Essay Packets	1,716
Notices of Public Relations Conference	800
Public Relations Bulletin	36,048
County Medical Society meetings	6
District Medical Society meetings	4
Speeches before Civic Clubs	3
National Conferences attended	3
Regional Conferences attended	1
County Public Relations Committee members	14
Long Distance Calls	158

Speaker Murphy: Is there a motion that Mr. Hilliard's report be received?

Dr. Dixon: I so move.

[The motion was seconded by several.]

Speaker Murphy: Is there discussion?

[The motion was put to a vote and carried.]

Speaker Murphy: I suppose that paramount in our lives, both individually and collectively, is the Woman's Medical Auxiliary of the Medical Society of the State of North Carolina. Mrs. Robert D. Croom, Jr., the President of that admirable and indispensable organization, is here to give her report. We receive it gladly.

[The audience arose and applauded.]

Mrs. Croom: Mr. Chairman, Dr. Rousseau, Members of the Medical Society and Guests: It is indeed a privilege to bring you greetings and best wishes from the 2025 members of your Auxiliary. I am not going so far as to say that I take pleasure in appearing before so important a body. Dr. Rousseau says, "Do not be nervous; they are just a bunch of old husbands." [Laughter] I will say I am not unaccustomed to menfolks. I am the only woman in a household of four, one doctor and three good prospects, and so it isn't the quality of my audience that I find disturbing; I should say it is the quantity.

As President of the Auxiliary to the Medical Society of the State of North Carolina, I respectfully submit the following report:

My tenure of office began in May, 1955, and, during this month, committee chairmen appointments were completed and plans were made to attend the National Convention in Atlantic City in June. It was a great privilege to serve as the presidential delegate and from this convention I received inspiration and information for the tasks ahead.

The better part of the summer months was spent in collecting data and compiling the year-book and making arrangements for the Board of Directors meeting and School of Instruction at the Morehead Planetarium in Chapel Hill on September 14.

Excellent attendance and inspiring messages from Dr. James P. Rousseau, President of the Medical Society of the State of North Carolina, and Dr. Charles F. Carroll, State Superintendent of Public Instruction, and greetings from Mr. William N. Hiliard, Public Relations Director of the Medical Society, made this a memorable occasion. (We regretted the absence of Mr. James T. Barnes, a regular attendant.) The Committees presented splendid reports concerning the year's plans and packets of helpful material and suggestions were delivered to Board members and county presidents.

It now gives me pleasure to present this report concerning our activities which I feel brought to a successful conclusion the plans and hopes of the Auxiliary year 1955-56.

Our program has been large and varied:

1. Increased membership.
2. Public Relations.
3. Nurse Recruitment.
4. Legislation.
5. Civil Defense.
6. American Medical Education Foundation.
7. Today's Health and Bulletin.
8. Rural and Mental Health.
9. Auxiliary Projects.
10. Radio and Movies.

Our goal this year was "every doctor's wife a member." One hundred and sixty-three new members were added, making our total (membership or number) 2025. We now have two 100 per cent organized districts—First and Second—and nine 100 per cent membership counties—Pitt, Carteret, Sampson, Lee, Scotland, Hoke, Lincoln, Caldwell and Burke. Twenty-six counties reported increased membership. One county gave ten honorary memberships to widows.

Our very efficient News Editor, Mrs. George Paschal, has had two goals this year in addition to the usual one of supplying us with four interesting copies of the Auxiliary News. First, the mailing list has been brought up to date, and second, an accurate card file has been established.

Forty auxiliaries contributed to the American Medical Education Foundation in the amount of

\$1579.80, a 50 per cent increase over last year. Medical Education Week was observed April 22-28, 1956.

A total of 616 subscriptions to **Today's Health** have been sold. This report is approximate, since many subscriptions have been renewed directly through the office in Chicago.

We have 115 subscribers to the **Bulletin**, which is a small increase over last year. One county reported 100 per cent subscribers.

Sixteen auxiliaries gave civil defense programs—several with guest speakers. Auxiliaries have had representation at local defense meeting and it is hoped that we will have greater participation in this vital program and excellent attendance at the conference on May 9-10, in Charlotte.

Legislation has had an important place on our program with several bills being studied. Special emphasis was given to H.R. 7225 and our state participated in the fight against its enactment.

The Auxiliary has continued its interest in rural health with seven out of ten districts reporting on programs. Special study was urged on farm and home accidents. We had fine representation at the various conferences. One Auxiliary acted as hostesses to the Western Rural Health Conference.

Our mental health program has been expanded this year. Many Auxiliary members have served on Boards of Directors; some are members of county and state associations; and others have given direct service to mental clinics and hospitals. One mental health clinic was established and one health fair sponsored.

Seventeen Auxiliaries have had Yearbooks—excellent ones from which it would be too difficult to select a best one.

Interest has increased in the field of radio and movies. Nineteen Auxiliaries used these mediums in their programs for Doctor's Day, Mental and Rural Health, Nurse Recruitment, North Carolina Children's Home, Cancer, Heart, and American Medical Education Foundation.

We have cooperated in the Southern Medical Auxiliary's projects: Observance of Doctor's Day and Research and Romance of Medicine. Forty-six Auxiliaries reported plans to celebrate Doctor's Day and five were engaged in Research and Romance of Medicine, listing fifteen activities.

Our main project at a state level continues to be our sanatoria beds. Our third endowment fund of \$10,000 has been completed for the Cooper Bed in Wilson, occupied by Miss Rita Rivers Moore, a graduate nurse of Marshallburg; the others are the McCain Bed in McCain, occupied by Mrs. Betty Jean Hughes of Asheboro, a young mother with two children; and the Stevens Bed in Black Mountain, no guest at this time. Our newest, the Yoder Bed, Chapel Hill, is occupied by Mrs. Nellie Bolick. The year-round remembrance plan for our guests in the sanatoria beds has worked beautifully and all Auxiliaries cooperated according to schedule.

The Student Loan Fund, maintained for sons and daughters of doctors but unused since 1941, has been made available to other worthy and qualified candidates through a change in the By-Laws. This year we have been happy to have three recipients of this loan: Miss Mary Lide, in her junior year at the Bowman Gray School of Medicine, Mr. Jerome Schachter, in his senior year at the Duke University School of Medicine, and Mr. William Purcell, in his senior year at the University of North Carolina School of Medicine.

The most significant accomplishment has been in the field of nurse recruitment. Forty-two Auxiliaries have taken part in this program. One Auxiliary has had a home nursing course in all county high schools; speakers have been provided for career days; prospective students have been entertained with teas and tours of hospitals; students and nurses have been remembered with parties, shows, books, theater tickets, and numerous gifts; nurses' lounges have been furnished and decorated; libraries have been established; one Auxiliary instituted a new award—capping awards—for the highest scholastic average among the student nurses in three hospitals; films on nursing were shown in nine high schools; future nurses' clubs were organized; information was sent to guidance counsellors in 23 high schools; and one Auxiliary has a hospital nurses' aid course for high school student. The Auxiliary maintains 14 county scholarships, one district scholarship, one Past President's scholarship, and nine loans.

Leaving the most important phase of our work until the last, it is most gratifying to report on our public relations which, I believe, can be defined as doing good. The Auxiliary has endeavored wholeheartedly this year to meet the challenge given by the distinguished President of our State Medical Society, Dr. J. P. Rousseau, "The best way to serve the medical profession is to put the public interest above every other consideration." Our members have given active leadership in community health, following our national theme and in all community affairs, taking part not only in all health programs, but also in all religious, civic, educational, charitable, safety and civil defense activities, following our own theme, "Service to Others." A list of North Carolina members was sent to the Chicago office for "Who's Who in the AMA Auxiliary."

To list a few of the activities and gifts: Monetary gift to the Salvation Army Maternity Home; recovery bed to hospital; croup and oxygen tent to hospital; party for hospital personnel; set-up room for cancer dressings; boxes of supplies for flood victims; equipment for hospital pediatric playroom; book carts for hospitals; entertainment for foreign college students; benefit rummage sale for hospital; one Auxiliary had a second-place winner in the State Essay Contest; sponsored Fair Booth; kept Red Cross office open when threatened with closure for lack of funds; one nurse recruitment chairman gave free nursing time valued at \$500; equipment for mentally and physically handicapped; transportation for clubs needing it; three volunteer workers each Monday for public health office; one Auxiliary has 75 per cent of its membership active in 25 local organizations; another has 95 per cent of its membership active in civic work, and countless numbers are members of hospital auxiliaries.

It was my good fortune to be able to accept all Auxiliary invitations extended me with the exception of the Third District, one which conflicted with an invitation already accepted. In all, I attended five district and twelve county meetings.

I served as a member of the State Advisory Committee on Poliomyelitis vaccine and of the Robeson County Heart Committee. I attended a special meeting in Raleigh, November 20, at the request of Dr. J. P. Rousseau. I represented the Auxiliary on April 6 at the Public Affairs Conference of the Farm Bureau Women in Raleigh. I regret that it was not possible for me to attend the many conferences and meetings to which I

was invited but at all times the Auxiliary was most ably represented:

North Carolina Woman's Council—

Mrs. E. M. Robertson and Mrs. C. T. Wilkinson

World Affairs—Mrs. K. M. Brinkhous.

North Carolina Family Life Council—

Mrs. J. D. Stratton.

North Carolina League for Nursing—

Mrs. Frank Wilson, Jr.

Rural Health—Mrs. P. G. Fox and

Mrs. E. T. Bleddingfield.

Southern Medical Auxiliary—

Mrs. Harry Johnson and

Adult Education—Mrs. Harvey May.

In closing, I could add countless words to this report in commending the Auxiliary members for their loyal cooperation, tireless efforts and prayerful interest. May it suffice to say I am grateful for the privilege of serving as their President. The meaning of being an Auxiliary member has become deeper; friendships have become stronger and, together, I believe we have progressed in our Auxiliary work.

As we look forward to another year under the capable and enthusiastic leadership of Mrs. Harvey May, I hope we may meet with even greater effectiveness our opportunities and responsibilities.

For your untiring interest, wise counsel and splendid cooperation, we have this year gratefully dedicated our Yearbook to you, our husbands, our doctors, our friends, to whom we owe our organization and in whose interest we serve. [Applause]

Speaker Murphy: We thank Mrs. Croom for that report. May we have a motion that it be accepted by the House of Delegates?

Dr. Dixon: I so move.

[The motion was seconded by several.]

Speaker Murphy: Is there discussion?

[The motion was put to a vote and carried.]

Speaker Murphy: Thank you, Mrs. Croom, very much.

I have a few announcements for you. I wish to call your attention to the fact that Dr. Lenox Baker and his Committee seem to have excelled even their fine record in the securing of scientific exhibits. Will you show your interest and improve yourselves by attending these exhibits? Our technical exhibitors are here. Their financial contribution to the cause makes this meeting possible. They are worthy of your attention and your patronage.

I have been asked to call to your attention that at the General Session on Wednesday there will be an election. At that time the Board of Medical Examiners will be chosen. Dr. John S. Rhodes' term on the Board of Trustees of the Hospital Savings Association expires, and he will be replaced. On the Editorial Board of the *North Carolina Medical Journal*, the terms of Dr. Ernest Furgurson, Dr. G. W. Murphy, and Dr. W. M. Johnson expire, and they are to be replaced.

In case there are some who are unaware of it, I want to tell you that our own Dr. Joseph J. Combs, of Raleigh, is at this time the President of the Federation of the Boards of Medical Examiners of the United States. [Applause] He has become a national figure who has really brought credit and honor to the Medical Society of the State of North Carolina. If any of you have escaped the opportunity to see what he looks like, I am going to ask him to stand up for just a minute. Joe! [Applause]

I am going to ask before I go any further that Dr. Elias Faison and Dr. Matthews and Dr. P. J. Moore be prepared to serve as tellers for the elec-

tion of the General Practitioner of the Year. When Mr. Barnes gives you the ballots, if you will distribute them to the delegates and then, after the presentation has been made, collect the ballots, and tally them, it will be appreciated. While you are tallying the ballots, we will go ahead with the business.

Now we come to the part of the program which requires a little strain on everybody's part, and we, after all, are friends and brothers. As a keynote for our deliberations, I would like to quote to you a part of the Seventh Verse of the Eighth Chapter of St. John when Christ said, "He that is without sin among you let him cast the first stone at her."

As we take up this business, I think it should be our goal to conduct the business affairs of the Society with the greatest possible dispatch but without sacrificing a complete and free expression of opinion. As an aid to that end, I have the same four simple little rules that I have asked you to observe in times gone by.

First, will you address the Chair when you stand up, and, by the way, through the microphone, that is, if you wish to speak on any subject, will you come either to this microphone here or one provided back there so that you can be heard?

And will you begin by giving your name and the name of the county which you are from so that not only the delegates will know who you are but the stenographer will have the opportunity to compile an accurate record of the meeting?

And will you limit your discussion to the subject at hand.

Then, will you direct your remarks to the group as a whole and not to a friend next to you, which is always confusing?

This comes a little bit late, but all of the committee reports really comprise an excellent compilation of the business affairs of this Society, and this compilation has been supplied to each delegate in advance, and you have been given a copy of it today. All of the information within practical limits is contained therein. I have an agenda up here which takes up these various and sundry matters, but not necessarily in the order that they are in this compilation. As I come to them, I will give you the page in the compilation so that you may turn to the particular report under discussion. It has been the practice, and it has worked out well for the Chairman, to announce the report to be considered and to give the Chairman of the Committee or some member of the Committee the opportunity to add to that report, and then to have a pause so that the members of the House may comment. If neither of these things happens, the report is automatically adopted without putting a formal and time-consuming motion for each one.

Is it your pleasure that this procedure be followed?

Dr. Dixon: I so move.

[The motion was seconded by several, was put to a vote and carried.]

Speaker Murphy: The motion is carried, and that is a blanket motion which will be used when it applies.

I wish to announce now that Dr. Arthur London, the Chairman of the Committee on the Doctors' Insurance Plan, has an emergency situation and has been called back to Durham. As a courtesy to him, and one which is gladly given, the report of the Committee, which is Item 46, will be the first committee report taken up ahead of Committee Report No. 1.

Speaker Murphy: Now we come to the report of the Committee on the General Practitioner of the Year. Dr. Ben H. Kendall, of Shelby, is Chairman. Dr. Kendall will present the names of the three candidates whom his Committee has selected out of the group and will tell you about them, and then the chosen representative from the county of each one of those candidates will be given a very scant minute or two to extol the virtues of his particular favorite. After that, you will be asked to prepare your ballot for the candidate of your choice. The name will be put on the board. Once the ballots have been collected, we will proceed with the business of the Society while they are being counted. Dr. Kendall!

Dr. Kendall: Mr. Speaker, Distinguished Guests, Ladies and Gentlemen of the House of Delegates: It is a distinct pleasure and privilege for me to discharge my duty here and to bring to you the information presented to the Committee on the General Practitioner Award.

I have a deep feeling of respect, humbleness and humility when I contemplate the accomplishments of these masters of the art of medicine. So few can ever hope to be accorded the degree of respect and admiration that these doctors have received from their patients and friends while they were being touched by the wisdom of the hands of time and experience. May we say to each of them, well done, and I wish to congratulate every applicant for this award here and now and say that each one is deserving of the Doctor of the Year Award.

These three brochures presented were unanimously selected by your Committee. The first brochure that the Committee wishes to present to you for your consideration is that of Dr. William H. Kibler, of Morganton. He was endorsed by the Burke County Medical Society as their doctor of the year. These 77 pages are well indexed and prepared. There is a good biography of Dr. Kibler. This brochure contains 41 testimonial letters, 12 newspaper clippings, also many photographs of interest.

As stipulated by a memorandum dated November 2, 1955, and sent to all county medical societies by the North Carolina Medical Society, one speaker is granted five minutes in the House of Delegates to present the qualifications of each candidate for this award.

I have been asked to call on Dr. John Reece, of Morganton, who will present Dr. Kibler's record and qualifications to you.

Dr. Reece: Mr. Speaker, Mr. Chairman, Honorable Guests, Members of the House of Delegates of the Medical Society of North Carolina: This is certainly a pleasant task and also a very challenging one, to properly present to you Burke County's candidate for doctor of the year, Dr. William Herbert Kibler, of Morganton.

The documented material that is here for you to see and has been examined by the Committee represents and contains many items of interest in the life of Dr. Kibler, and it would be too long for me to try to review it all. Briefly, I would like to say just a few things concerning Dr. Kibler. Burke County is his ancestral home. His forebears were original settlers in that area. He was born in Burke County in 1884, and as a child his interest in medicine developed with an accident which almost caused him to lose a finger, but he promised his doctor at that time "by working with you we will save it."

Dr. Kibler was educated in the private schools and public schools of Burke County and attended the University of North Carolina where he re-

ceived his first two years of medical education. To support himself during his educational years, he was engaged in many types of endeavor, from a clerk in the stores to running streetcars in Long Island. Further, he taught school in the city school system of Durham, North Carolina, and also taught in Guilford College, teaching science courses there. After he graduated from the University of Pennsylvania in 1914, he returned to McDowell County, a neighboring county, and opened his office to practice medicine in Seville. Following this, he was appointed health officer in Nash County. In 1915, he was appointed by the Rockefeller Foundation to continue and carry on their research eradication program of hookworm disease in Central and South America.

He returned to North Carolina in 1918 and waited for assignment to the Army when the war ended. He then returned to Burke County and had offices in various rural areas of the county. In 1923, he opened his office in Morganton for the general practice of medicine and surgery and has continued to practice since that time. He has been President of the Burke County Medical Society on two occasions, Chief of Staff of the Valdeze Hospital on several occasions. He has also served as President of the Ninth District Medical Association and has been most interested in promoting the educational welfare in that area. He has also worked with the Extension Division of the State Medical Society and the University of North Carolina in organizing the postgraduate courses at Morganton.

We are delighted to present Dr. Kibler to you for your consideration. He has been an inspiration to all of us in Burke county. He has demonstrated to us that medicine is just not a way of making a living, but a worthy and honorable way of life. We have always considered Dr. Kibler our doctor of the year, and we hope that you will favorably consider him and make him the doctor of the year for 1956 for the Medical Society of North Carolina. Thank you! [Applause]

Dr. Kendall: The second brochure that we present is that of Dr. Burnice Earl Morgan, of Asheville, endorsed by the Buncombe County Medical Society as their doctor of the year. This brochure is well indexed and prepared. There is a good biography of Dr. Morgan. This brochure contains 87 testimonial letters, 15 newspaper clippings, also many photographs of interest. I have been told that Dr. J. B. Anderson, of Asheville, would present Dr. Morgan's record and qualifications to you.

Dr. Anderson: Mr. Speaker, Mr. President, Mr. Chairman, Honored Guests and Fellow-Members and Other Guests of the Society: Thirty-seven years ago, there came back to the mountains of Buncombe County a physician, Dr. Burnice Earl Morgan, who began the practice of medicine on horseback in his native community. He has used boats in crossing rivers and creeks to see the ill. He has delivered babies by the light of lanterns and pine logs in many of the mountain huts.

I had the distinct pleasure while attending grammar school of having this outstanding gentleman come and live with us in our home to begin his practice of medicine in Asheville. Among the 200 physicians in our community, he is the most respected for the many good deeds that he has performed. Obviously, I cannot enumerate all of them, but I would at this time like to enumerate a few of his many accomplishments. In the voluminous practice which he has, numbering many thousands of free patients, he has delivered over 10,000 babies. He is a Past President of our Bun-

combe County Medical Society. He is also a Past President of the Tenth District Medical Society. He has served for five years on the State Medical Society Maternal Welfare Committee. He was Chief of Staff of the Aston Park Hospital for six years. He was also Chief of Staff of St. Joseph's Hospital for two years. He was Chief of the Department of Obstetrics in both of those institutions for a period of eight years. He has been a regular attendant at the various symposia throughout the State of North Carolina, and he has continued his postgraduate study which he is continuing at the present time.

Not only has he been active in his profession and not only has he been interested in education, but he served as a member of the County Board of Education for a period of eighteen years. Fourteen years of that time, which is the longest period in history, he served as Chairman of the County Board of Education, and it was during this time that he sponsored a \$5 million bond issue for the improvement and consolidation of the schools for both the white and colored. He has been a most outstanding civic leader and is a real leader in his church, which is proven by the fact that he has been lay chairman of his church for nineteen years. He has been a heavy contributor to the construction of our new \$4 million Memorial Mission Hospital and, at the present time, he is participating in the promotion of a building fund for a huge addition to St. Joseph's Hospital.

To many of us who have been inspired by Dr. B. E. Morgan, as we know him, and in the minds of those of us who know him, no physician in the nation is more qualified for the General Practitioner of the Year than is Dr. B. E. Morgan, of Asheville, North Carolina. Thank you. [Applause!]

Dr. Kendall: The third brochure that we present is that of Dr. Samuel Floyd Scott, Union Ridge, Route 2, Burlington. He is endorsed by the Alamance-Caswell Medical Society as their doctor of the year. This brochure is well prepared, contains a biography of Dr. Scott, many testimonial letters and newspaper clippings, also many photographs of interest. Dr. George Carrington, of Burlington, will present Dr. Scott's record and qualifications to you.

Dr. Carrington: Mr. Speaker, Mr. President, Mr. Secretary, Mr. Chairman: The Alamance-Caswell Medical Society is glad to present to you for doctor of the year their candidate who, differing from the other two excellent candidates, is a country doctor.

As I understand the purpose of this selection of the General Practitioner of the Year, it is to hold up to the people of the United States some doctor whose philosophy and activities exemplify the ideals of what we as doctors think of as the ideal doctor, or symbol of what a doctor should be. We think that Dr. Scott as nearly as any man can exemplifies these ideals.

He had his basic grounding in the humanities at the University of North Carolina where he graduated with an A.B. degree. I believe a basic grounding in the humanities is beginning to be more and more recognized as important in medicine and in industry.

He went then to the University of Pennsylvania, and after serving one year's internship in Philadelphia, he returned to Alamance County in 1919 and entered into general practice.

His devotion has been to medicine and to the good of the community in general. He saw that the county was poor in that section so he interested the county agricultural agents and the state agents in promoting good farming in the

surrounding country. That country now shows the results of what he has done.

He delivered out in the country 6000 babies several years ago; I don't know what the number is now, but it is well over 6000.

He has been President of the County Medical Society and for many years was on the Board of Health for the County.

During the war he served as the Chief Examiner for the Draft Board and for four years gave an average of twenty hours a week to those duties. He did it so well that he received citations from two Presidents, both President Roosevelt and President Truman, who recognized the character of his work by sending individual citations to him. His interest in churches has not been confined to his own church. He has contributed financially and otherwise to all of the churches of all denominations and races in that community.

To show what he has done in the way of helping medicine in the country where there isn't even a crossroads, in 1948 he built a \$50,000 office building, a clinic, out there in the country. That is not a clinic with beds in it to keep people. He has one bed in the place for observation of any patient that needs to be under observation for a few hours before disposal is made.

In that connection, he is not only interested in community medicine, but one of his sons is now back in practice with him in medicine and another one in dentistry, and there is a third son on his way to being a doctor.

In 1949, he established either the first or the second two-way aerial communication, radio communication, in the country, so that he could give the people of that community coverage no matter where he was if an emergency call came in.

It is interesting that when Dr. Murphy and Wingate Johnson and Arthur London and I were working, fighting the National Physicians' Committee, fighting socialized medicine, Dr. Scott said very simply that all in the world we need to do to fight socialized medicine is for the doctors to give competent medical care at a price the people can afford, and that, I think, is the basic philosophy to which we have returned.

He has been recognized by the Hospital Savings Association as exemplifying the kind of coverage that the ideal doctor gives. The last issue of Community Health, which I presume many of you have received, used him as the symbol of the general practitioner. The frontispiece is a picture of him going on a call, and it somewhat facetiously says, "This is a rare view, but he looks good any way you look at him."

We think as a symbol of the type of ideal American doctor that would be useful for the people of our country to see, that Dr. Scott would make an excellent example. Thank you! [Applause]

Dr. Kendall: Mr. Speaker, the Committee on the General Practitioner Award has presented in alphabetical order three candidates to the House of Delegates for them to select a North Carolina doctor of the year by ballot.

Speaker Murphy: Gentlemen, will each of you now write on your ballot your choice among these three fine gentlemen—Dr. Kibler, Dr. Morgan, and Dr. Scott—to be picked up by the tellers as quickly as possible.

On final ballot count report, Dr. William Kibler, Morganton, was elected General Practitioner of the Year.

We come now to the reports of Related Organizations. There is one item in this report, relating to the annual registration of physicians,

which was mentioned by Dr. Rousseau in his address and which is recommended to the House by the Executive Council, that such a procedure be authorized, and the Executive Council has requested Dr. Joseph Combs, Secretary of the State Board of Medical Examiners, to take a few minutes to explain the background of this particular item. Dr. Combs!

Dr. Combs: Mr. Speaker, Mr. President, Honored Guests, Members of the House of Delegates, Ladies and Gentlemen: The President of the Society, last summer, was going over the proceedings of the New Jersey State Medical Society. As you know, he was a very valued member of the State Board of Medical Examiners. We gave him up very reluctantly, but we felt that the State Society needed his services, and when they elected him President we accepted his resignation from the Board.

In going over those proceedings, he saw where the House of Delegates of the State of New Jersey had just backed the Board of Medical Examiners in recommending an annual registration for doctors in the State of New Jersey. He contacted me and asked if I would bring it before the Board of Medical Examiners for this Board to consider and make recommendations. The Board of Medical Examiners, in view of the fact that they would not be in office very much longer, considered this question very carefully. It was a question whether they should take an action or leave it to the new Board which you elect at this meeting. It was decided that since we had been working for about six years, we probably would be in a better position to make a recommendation and therefore, with that in mind, the following resolution was passed:

That the Board of Medical Examiners approve annual registration of physicians, provided that the fee does not exceed \$2 per registrant per year and that the President and the Secretary present this matter at a meeting of the Executive Council of the North Carolina Medical Society.

The Secretary made an extensive survey of all the states in the Union in regard to the question of annual registration. Thirty-two have annual registration. Three have biennial registration. Fourteen had no annual registration as of that time. New Jersey reported no annual registration, but they are in the process of putting it in at the present time.

Those fees run from nothing to \$15 per year. The states that do not have the annual registration—Alabama, Delaware, Illinois, Kentucky, Maine, Massachusetts, Maryland, Michigan, Mississippi, New Hampshire, North Carolina, Ohio, and South Carolina.

Gentlemen, this has been presented to this House before, not by the present Board but by previous Boards. It has always been felt that it is just another tax on the doctors. I can assure you that that is not the reason that this Board recommends it. We feel, as other states who made their comments felt, that it is necessary for the regulation of medical practice, and this Board would not recommend it without putting a limit on the amount of the registration. I assure you that we have no idea of putting this in as a revenue measure. The finances of this Board were very, very pitiful for the first two or three years, but we went to the State Society to back us up in changing the fees for licensure and endorsement fee, and I am glad to say that our financial condition now is very solvent.

This Board has been very cognizant of the situation in Western North Carolina where people would like to come in and do seasonal practice. In our

experience in this Board work, we are very appreciative of the condition in Florida and we are very sympathetic with their attitude about endorsement relations between the states. They take that attitude because they are not going to let people go down to Florida and be "snow birds," as they call them. We have to watch this situation in North Carolina. I have received complaints from the western counties about men coming up there and doing seasonal practice, but if the man does not require a North Carolina license, there is nothing we can do about it.

This Board was left a problem on a practitioner in this state by a previous Board, but as they went out of office they said, "The problem should have been strictly in their punishment of this man." We received from the law officials of that county some very damaging information about the conduct of this doctor. We wrote him a registered letter with a return receipt to appear before this Board. He wouldn't take the letter out of the Post Office. It was returned to us. There were no new charges. The Board had taken their action on the previous charges. We felt there wasn't anything we could do about it. If you had annual registration, that man would have to show reason and cause why his license would be continued and why he should be allowed to register annually.

Another situation—I received a communication from the State Board of Health asking about the question of a license of one of our colored brethren in Elizabeth City, North Carolina. We looked up through the Book of Licensure to see if we could find whether this man was licensed, what year, what his medical school was. We couldn't find that he was licensed. These books, gentlemen, sometimes go back a hundred years, and the index is not always absolutely complete. We don't say that a man is not licensed until we exhaust every type of information. So I got in touch with my friend, Zack Owens, in Elizabeth City, who at that time was President-Elect, and asked him to call on this doctor, see when he was graduated, take a look at his license as issued by the Board of North Carolina Medical Examiners and give me the year so I could look it up in the Book of Licensure.

Dr. Owens called on that fellow and found out he had never been licensed in this State. He had been practicing medicine in Elizabeth City for ten years and they had no reason to suspect him because he moved from Ahoskie over there and he had been practicing in Ahoskie for years before that.

Now, that would have been caught with annual registration because there will be a list published each year and sent to each registrant of the doctors that are annually licensed.

Gentlemen, I have a lot of other illustrations of the same type of cases that I could carry on, but there is no need for me to take up your time.

I got comments from all of the various states about why they feel this is necessary, and they give you a lot of good arguments. I was surprised in just reviewing it that one state said that lots of times a doctor's assets are sold when his estate is being settled and if a license is sold and the license is still in force, it is a means of perpetrating a fraud. They probably change the name on it. One doctor went through various states in these United States and was licensed, but never had been in a medical school.

I will be glad to answer any questions, but I don't want to take up too much of the time of this House of Delegates.

Mr. Speaker, we are very fortunate in having present with us as a representative of the Ameri-

can Medical Association Dr. David Allman. Dr. Allman has been on the State Board of Medical Examiners of the State of New Jersey for a period of fifteen years. He has been President for the last eight years. I would appreciate it if the Speaker would give him an opportunity of telling this House of Delegates how important he thinks that annual registration would be to the State of North Carolina.

Speaker Murphy: Dr. Allman, will you come to the stand, please? Dr. Combs has already introduced Dr. Allman to you, and I will not make any further introduction. He will speak to the General Session somewhat later. Doctor, we are very happy to hear you. [Applause]

Dr. Allman: Vice President Hill, Mr. President, Mr. Speaker, Members of the House of Delegates, and Us Common People: I don't want to take much of your time. I know how you fellows feel at these meetings. I feel the same way at our meetings in New Jersey. But I feel what President Combs has just talked about is by far the most important piece of business you have got before you at this meeting.

About twenty years ago, we tried to get this through the House of Delegates of the Medical Society of New Jersey, and the then President was pretty nearly ostracized, practically thrown out of the House of Delegates. The men said just what Dr. Combs told you, that it was another form of taxation, it limited your freedom, and so forth.

Nothing was done about it then for about five years. That was about fifteen years ago. Then it was again introduced by the man who was then President and the same thing happened.

Then we of the State Board—I got on the State Board about that time—decided that there was no use trying to take it up with these fellows, that we just couldn't convince them that it is very important. It is just as important as Dr. Combs said for the many reasons he has told you and many, many more.

However, in the last two or three years, the members of the Medical Society of New Jersey, those not on the State Board, had been coming to us and asking for annual registration. They see the importance of it. They see the reasons for it.

We have many seashore resorts, the same as you have in the western part of North Carolina, and people come in from Pennsylvania, from New York, without license, and they practice two or three months in the summer. We have no way of checking on them. They hang out their shingles, do a lucrative practice, and before we catch up with them they are gone. They may not even be licensed in the State. Annual registration will, of course, obviate all that, there is no question about it. As I say, it gives us an opportunity to know who's who, to know who is entitled to practice in the State, and the \$2 or \$3 in fee that you are going to have to pay is certainly no hardship, and it isn't any form of taxation.

We passed, and I hope you are going to pass today or tomorrow—whenever you pass it—the resolution to have annual registration in your State.

After we passed that, we felt maybe biennial registration would be better. That is up to you, and I am not trying to tell you how to run your business. It makes it a little less of a hardship to have it biennially. We figure if they register every other year it would be all right, but our law is so written that it is annual, because that is what our House of Delegates passed. It is entirely up to you whether you want it annual or biennial.

We had in our law originally a fee not to exceed \$5. I don't think you could implement this for \$2. I think by the time you set up your system of bookkeeping, and so forth, it is going to cost you more than \$2 to get started. The fee could be changed, lowered at any time, and if you put in your law that the fee is not to exceed \$2, you may run into a loss for a few years. We had it not to exceed \$5, with the hope of feeling this out the first year until we installed the system and then perhaps cutting it down.

It is not a money-making proposition. No Board of Examiners wants to make money. They just want to know who is practicing and who has the right to practice.

You also must include a penalty for failure to register. Without that, the law is of no value at all. We are going to send a man a card like a narcotic license so he can display that in his office, and it will be no trouble at any time for anybody to know whether a man is registered in New Jersey, because all they have to do is look for this card alongside his narcotic license. If he doesn't have a card, and he is registered, we can find him.

This is a big undertaking for the Board of Medical Examiners. We in New Jersey know it is going to mean a lot of work, but we are willing to take on that extra work because we feel that it is the only way that we can properly police and properly govern the fellows who are entitled to practice in the State.

You may think the cases are very few. I think when you look around you might find that you have some people that you never suspected of practicing in North Carolina without a license. The only way that you can find out who they are, the only way you can know who is entitled to practice in North Carolina at this time and next year and five years from now, is by having either annual or biennial registration, and I strongly recommend that you start it. We in New Jersey are about twenty years too late, and I hope you in North Carolina won't miss the boat at this opportunity. Thank you! [Applause]

Speaker Murphy: Thank you, Dr. Allman.

Dr. Sams: Representing a district in the State where we have so many fellows coming in to our area for two or three months only and then going out again, we are keenly aware of this problem.

There are numerous abuses in this transient set-up. I, personally, think this is one of the forward moves of the House of Delegates, to set up this annual registration.

As a member of the Council, I would like to make a motion, if permitted, sir, that the North Carolina House of Delegates adopt the recommendation of the Board of Medical Examiners on a biennial basis at a price not to exceed \$5.

Speaker Murphy: There are two things that I would like to say to clarify the situation. In the first place, this comes as a recommendation to the Executive Council. Secondly, you will understand that if Dr. Sams' motion or a similar one is passed, what it will amount to is that the Executive Council, through the offices of the Legislative Committee, will undertake to get the Medical Practice Act amended, that is, we can only approve of the principle of annual registration. Is there a second to Dr. Sams' motion?

[The motion was seconded by Dr. Hugh Wolfe, of Guilford.]

Speaker Murphy: Is there any further discussion? (Discussion ensued.)

Dr. Strosnider: I second it.

Speaker Murphy: Is there any further discussion?

[There were calls for the question.] (Further discussion ensued.)

Speaker Murphy: Is there any other delegate who desires to discuss it? If not, all in favor of that motion please say "aye"; opposed, "no." The motion is carried.

Now, gentlemen, I have an extraordinary pleasure which I will claim for myself. Dr. Elmer Hess, the President of the American Medical Association, has just come to the rostrum. I will ask that he stand so you can see how fine and handsome he is, and I will ask you to stand and stretch your legs in special appreciation of his presence. [Applause] We will be honored by an address by Dr. Hess and you will have the opportunity to see him again.

In keeping with our promise, the next item that we are going to take up is Item 46, the Doctors' Insurance Plan, Dr. Arthur London, Chairman. May I say immediately after that I hope you will have the stamina and patience to consider the special report of the Committee on Constitution and By-Laws before we adjourn for dinner.

Medical Advisory Committee On Doctors' Insurance Plan

At its initial meeting for the current fiscal year your Committee took cognizance of the fact that the "Doctors Program" had been in existence 4 years; that there were only 7,359 individuals covered by the policy and only 1,584 physicians out of a membership of 2,950 who had signed the participating agreement.

It was agreed that the committee confine its activities to determining why the limited sales and why the limited participation and make recommendations to improve these conditions.

Regarding limited sales:

It was determined that Hospital Savings Association had employed a well trained insurance executive (Mr. Lang) to supervise and promote the "Doctors' Program." It was his opinion, and this was concurred in by the committee, that the failure to sell the policy was in large part due to the income limits (\$3600.00 per family). It is to be noted that large sales must of necessity be made to groups rather than to individuals. Industry offers the greatest number of these groups. In most of your large industries, the employee's family income exceeds \$3600.00 and neither the employer or the labor union wish to contract for a policy which would cover some of its members as a service policy and others only as an indemnity. The former chairman of the committee, Dr. Norris Smith, went extensively into this income problem last year and his report was published in the North Carolina Medical Journal and a reprint has been sent to each member of the Medical Society.

With this information and the Hospital Saving Association recommendation, the committee felt that the income limitation should be increased and recommended that the income limit on the Doctors' Program now in force be changed to \$4200.00 per family income. The committee also recommends that a policy with \$6000.00 family income limit and commensurate fee allowances to physicians be prepared.

This recommendation was taken to the Executive Committee of the State Society and they approved "the committee's" request to present through the County Medical Societies the details of and reasons for the high benefit plans leading to the presenta-

tion of such increase plans at the House of Delegates in May 1956. Subsequent to this approval the staff of Hospital Saving Association in consultation with your committee has prepared these two policies and the accompanying fee schedule. With the increase in income limits there was a commensurate increase in the fee schedules in each of these policies.

Regarding limited participation:

The Committee felt this was in large part due to lack of information. Therefore, each member of the State Medical Society was sent a statement outlining the reasons for the inauguration of the Doctors' Program, a reprint of Doctor Smith's article, a schedule of fees and a letter requesting that he familiarize himself with these (see accompanying exhibits.) The presidents of each of the county societies was requested to appoint a "Doctors Program Committee" to study the details of these changes, to report them to the county medical society and to instruct the delegates from that society to the State Medical Society as to how they should vote on these proposed changes.

With the thought of increasing the information of these committees and the hope of clearing up any misunderstanding on their part, the chairmen of these county committees were invited to meet with the state committee on March 22nd. Twenty-one chairmen attended this meeting. It is hoped that their questions were answered satisfactorily and that the delegates to the state meeting will come prepared to cast an informed vote for or against these proposals.

The chairman of your committee has been connected with this insurance problem since the formation of the first committee in 1947. Under the recently, wisely, inaugurated plan of rotation, his term as a committee member expires with this meeting. From this long experience with this problem, it is his considered opinion that the society should wholeheartedly back these proposals or it should admit that it cannot accomplish its original purpose of providing a service benefit plan for hospitalized illness and should withdraw from the insurance field.

Arthur H. London, Jr., M. D., Chr. Durham

O. Norris Smith, M. D., Greensboro
Howard H. Bradshaw, M. D., Winston-Salem

Eleanor B. Easley, M. D., Durham
Willard C. Goley, M. D., Graham
Amos N. Johnson, M. D., Garland
Robert W. King, M.D., Fayetteville
Jacob H. Shuford, M. D., Hickory
Charles T. Wilkinson, M. D., Wake Forest

Dr. London: Mr. Speaker, Honored Guests, Members of the House of Delegates: It seems appropriate to review the background of the Doctor's Program. The urge to produce this program was stimulated in part by the growing popularity of hospital insurance with part-time surgical payments. This was in 1947. Accompanying this there was a tendency on the part of a few physicians to charge disproportionately more when the patient had insurance. At the inception of this program, there was a great fear of socialized medicine, and this fear was one of the principal motivating forces in setting up the program.

There was a desire on the part of physicians to demonstrate the ability to offer complete in-hospital coverage for the middle-income group and thus demonstrated the lack of need for any national

socialization of medicine. (The term "low income" was used and has continued to be used in our talking, writing and thinking. The group connoted by this term—the medically indigent and the indigent—were not in the minds of those promoting the Doctor's Plan.) Rather, they were thinking of the self-respecting workingman who wanted to pay his way medically and wanted to carry insurance which would permit him to do so.

Enthusiasm for the Plan on the part of the physicians began to wane with the discussion of, and even wrangling over, fees. There was and still exists a tendency to overlook the fact that "any plan whose controls are designed to benefit only the doctors and which requires no show of good faith by them will not find ready buyers." The inflation, with its increasing percentage of collections, further dampened enthusiasm. The election of the Republican Administration tended to make socialized medicine, as once feared, seem remote.

A depression or revived national interest in socialized medicine would make physicians clamor for widespread use of such a program as the Doctor's Plan.

Though not as dramatically presented, the conditions which prevailed at the inception of this idea continue to prevail. Whereas the total income of physician is up, his net income has been shrinking the past few years. Now the percentage of collections is dropping. The threat of socialized medicine has increased. Not in the open form of national legislation which could be openly fought, but insidiously through such means as increased development of and glorification of Veterans Hospitals. The tying of these hospitals to our medical schools, thus giving them increased dignity, and, at the same time, making the schools dependent on them for their existence, thus insuring their continued extension, is a form of socialized medicine. At the same time, the medical students and the interns are lulled into accepting the existence of the Veterans Hospitals and of the extension of their use beyond service-connected disabilities as a normal medical practice. The development of union hospitals, for example, the United Mine Workers' Chain, and such plans as the Permanente Plan, are other examples of creeping socialism which are blandly accepted because we cannot openly fight them.

I believe that the American people still want a free choice of doctors and hospitals. We are at the crossroads. We must present an acceptable, workable plan, and physicians must realize their responsibility in participating in this Plan or allow medical practice as we have known it to become extinct.

Why the Doctor's Plan? Admittedly, there are many good insurance policies available written both by Blue Cross and Blue Shield and commercial companies, and many physicians are satisfied with these, but is the public?

Each time a subscriber has to pay additional fees to the physician, there is some degree of dissatisfaction. The chief difference between the Doctor's Plan and other policies is that it is a service plan providing complete payment for service. If the fees set up in the Plan provide adequate payment for the services, the physician should be satisfied and the policyholder certainly will. The fees in every instance may conceivably not be exactly the fee the physician would have charged. However, if consideration is given to the fact that all fees are 100 per cent paid and promptly, without repeated billings, the physician

may readily accept some reduction in his usual schedule. Certainly no action by the Society could more surely promote good public relations.

(This statement that I have just read has been mailed to each of you. I am sure it is new to many.)

At its initial meeting for the current fiscal year, your Committee took cognizance of the fact that the Doctor's Plan had been in existence four years; that there were only 7359 individuals covered by the policy and only 1584 physicians out of a membership of 2950 who had signed the participating agreement.

It was agreed that the Committee confine its activities to determining why the limited sales and why the limited participation and make recommendations to improve these conditions.

Regarding limited sales, it was determined that the Hospital Savings Association had employed a well-trained insurance executive (Mr. Lang) to supervise and promote the Doctor's Program. It was his opinion, and this was concurred in by the Committee, that the failure to sell the policy was in large part due to the income limits (\$3600 per family). It is to be noted that large sales must of necessity be made to groups rather than to individuals. Industry offers the greatest number of these groups. In most of your large industries, the employee's family income exceeds \$3600, and neither the employer nor the labor union wish to contract for a policy which would cover some of its members as a service policy and others only as an indemnity. The former Chairman of the Committee, Dr. Norris Smith, went extensively into this income problem last year and his report was published in the North Carolina Medical Journal and a reprint has been sent to each member of the Medical Society.

With this information and the Hospital Savings Association recommendation, the Committee felt that the income limitation should be increased and recommended that the income limit on the Doctor's Program now in force be changed to \$4200 per family income. The Committee also recommends that a policy with \$6000 family income limit and commensurate fee allowance to physicians be prepared.

This recommendation was taken to the Executive Committee of the State Society and they approved "the Committee's request to present through the County Medical Societies the details of and reasons for the high benefit plans leading to the presentation of such increase plans at the House of Delegates in May, 1956." Subsequent to this approval, the staff of Hospital Savings Association, in consultation with your Committee, has prepared these two policies and the accompanying fee schedule. With the increase in income limits, there was a commensurate increase in the fee schedules in each of these policies.

Regarding limited participation, the Committee felt this was in large part due to lack of information. Therefore, each member of the State Medical Society was sent a statement outlining the reasons for the inauguration of the Doctor's Program, a reprint of Dr. Smith's article, a schedule of fees, and a letter requesting that he familiarize himself with these. The President of each of the county societies was requested to appoint a Doctor's Program Committee to study the details of these changes, to report them to the county medical society and to instruct the delegates from that society to the State Medical Society as to how they should vote on these proposed changes.

With the thought of increasing the information

of these committees and the hope of clearing up any misunderstanding on their part, the Chairmen of these county committees were invited to meet with the State Committee on March 22. Twenty-one chairmen attended this meeting. It is hoped that their questions were answered satisfactorily and that the delegates to the state meeting will come prepared to cast an informed vote for or against these proposals.

The Chairman of your Committee has been connected with this insurance problem since the formation of the first committee in 1947. Under the recently, wisely, inaugurated plan of rotation, his term as a Committee member expires with this meeting. From this long experience with this problem, it is his considered opinion that the Society should wholeheartedly back these proposals or it should admit that it cannot accomplish its original purpose of providing a service benefit plan for hospitalized illness and should withdraw from the insurance field.

Mr. Speaker, there are two motions which the Committee would like to present. The first motion is that the present Doctor's Plan as it is in existence now and has been adopted by this Society, the limitation of this Plan be changed from \$3600 to \$4200 family income.

Speaker Murphy: I am sure you have come prepared to cast an informed vote for or against without much trouble. You have heard the motion. Is there a second?

[The motion was seconded by several.]

Speaker Murphy: Is there any discussion? The motion is that the limits of the Plan be increased from \$3600 to \$4200 income. There is apparently no discussion. I am surprised.

[The motion was put to a vote and carried.]

Dr. London: Mr. Speaker, there is a second motion your Committee wishes to present, and that is that another policy be offered with a family income limit of \$6000. This, of course, carries increased premiums and commensurately increased fee schedules.

[The motion was seconded by Dr. Long.]

Speaker Murphy: Mr. Barnes just called my attention to the fact that the motion should come from a delegate. Does a delegate care to make that motion?

Dr. Joseph B. Stevens [Greensboro]: I will make that motion.

Speaker Murphy: Dr. Long, for the sake of the record, has already seconded. Is there any discussion? If not, all in favor say "aye"; opposed, "no." The motion is carried.

Now we come to the report of the Special Committee on Constitution and By-Laws, and I will ask Dr. Roscoe McMillan, the Chairman of that Committee, to come to the stand. Unless I hear some objection, we will ask him to present to you section by section the ones in which there is a significant change rather than to read the whole thing.

Dr. McMillan: Mr. Speaker, Honored Guests, President Rousseau, Members of the House of Delegates: Gentlemen, as Chairman of your Constitution and By-Laws Committee, I beg to submit the following:

I doubt if the preface really needs adoption by this House because it is just a preface. However, I feel I should read this to you. It is more or less historical data:

The medical profession of North Carolina was first organized in 1799. In that year, the Legislature of North Carolina enacted a spe-

cial Act incorporating the medical profession under the title "The North Carolina Medical Society." The General Assembly enacted another special Act in 1858 which provided that "the association of regular graduated physicians calling themselves The State Medical Society is hereby declared to be a body politic and corporate, to be known as distinguished by the name of the Medical Society of the State of North Carolina." This Act also created the Board of Medical Examiners of the State of North Carolina and is designated General Statutes, Chapter 90, Article 1.

Now, I come to the Constitution:

REPORT OF THE COMMITTEE ON CONSTITUTION AND BY LAWS

P R E F A C E

The medical profession of North Carolina was first organized in 1799. In that year the Legislature of North Carolina enacted a special Act incorporating the medical profession under title "The North Carolina Medical Society." The General Assembly enacted another special Act in 1858 which provided that "the Association of regularly graduated physicians calling themselves the State Medical Society is hereby declared to be a body politic and corporate to be known and distinguished by the name of "The Medical Society of the State of North Carolina." This Act also created the Board of Medical Examiners of the State of North Carolina and is designated as General Statutes, Chapter 90, Article 1.

C O N S T I T U T I O N

The following is the Constitution and By-Laws of this Organization.

Article I—Title of the Society

As provided in Chapter 90, Article I of the General Statutes of North Carolina, the name and title of this organization is "The Medical Society of the State of North Carolina." The words "The Society" in this Constitution and By-Laws shall be construed to mean the Medical Society of the State of North Carolina.

On motion, duly made and seconded, Article I was adopted.
(Final action).

Article II—Purposes of the Society

The purposes of this Society shall be to federate and bring into one compact organization the entire medical profession of the State of North Carolina, and to unite with similar organizations in other states to form the American Medical Association with a view to the extension of medical knowledge, and the advancement of medical science; to elevate the standards of medical education and medical service, and to promote friendly intercourse among physicians and to enlighten and inform the people with regard to the great problems of medical care and public health, so that the profession shall become more capable and honorable within itself, and more useful in the prevention and cure of disease, and in prolonging and adding comfort to life.

On motion, duly made and seconded, Article II was adopted.
(Final action).

Article III—Component Societies

Component societies shall consist of those county medical societies which shall hold charters from this State Society.

On motion, duly made and seconded, Article III was adopted.
(Final action).

Article IV—Membership of the Society

The membership of this Society shall consist of the following:

Section 1. The members of this Society shall be classified as Active Members, Student Members, Affiliate Members, Honorary Members, Intern-Resident Training Members, Scientific Members and Life Members.

Section 2. Active members of this Society shall be the members other than the Scientific Members of the component societies, and those physicians who are admitted by the Executive Council as herein after provided.

Section 3. Student Member. Any person who is regularly enrolled as a student as a candidate for the degree of doctor of medicine in the State of North Carolina and has completed the first two years of medical education, shall be eligible for student membership. Such membership may be obtained by applying to the Executive Council of the Society on a form provided for this purpose and election by vote of the majority of the Executive Council. They shall pay annual dues of three dollars (\$3.00), receive the North Carolina Medical Journal and enjoy all the rights and privileges of membership in the Society while they are students except they shall not be eligible to vote or hold office.

Section 4. Affiliate Members. Affiliate members may be elected by the Executive Council, upon recommendation of the component society of the county in which they are located, from those doctors of medicine who are citizens of the United States and engaged in teaching, public health, research work, holding positions in the Federal service, or engaged in salaried positions in our various state hospitals or penal institutions. They shall be doctors of medicine who have secured licenses to practice medicine in North Carolina and whose total professional income does not exceed the amount set from time to time by the Executive Council of the Society. They shall have all the rights and privileges of active members and shall pay annual dues equal to one-half the annual dues of active members.

Section 5. The Honorary Members. The Honorary Members shall consist of such regular physicians as have won distinction by their contributions to medical science; those elderly physicians who, prior to their retirement from practice, have displayed a proper interest in the welfare of the society; or who, by their example, have reflected credit and honor upon the profession. They must be nominated by the Council and receive a two-thirds vote of the members of the House of Delegates present at the meeting at which their names are presented for election. They shall be exempt from all dues and assessments and shall be entitled to all the privileges of the Society, except the right to vote and hold office.

Section 6. Life Members. The Life Members shall consist of those physicians who have been members of the Society consecutively for thirty years. They shall be exempt from all dues and assessments, and shall be entitled to all the privileges enjoyed by active members in good standing. The time of a member's service in the Armed Forces of our Country shall be considered as continuous membership in the Society.

Section 7. Intern-Resident Training Members. Physicians who are practicing in hospitals in the State of North Carolina, which are accredited by the Joint Accreditation Commission on Hospitals, for the purpose of interne or residency training, and who are licensed to practice, may be admitted to membership in the Society without becoming

a member of a component county society for and during the period of time in which such physician is actually engaged in such training as an interne or resident physician. Such physicians may be admitted directly to the Society upon presentation of credentials and certification of such accredited hospital and upon approval of the Executive Council, and upon the payment of dues in an amount of ten dollars (\$10.00) per year, or such additional amount as fixed by the Executive Council. They shall have the same rights and privileges as Student Members.

Section 8. Scientific Members. Scientific Members are those physicians other than white who are admitted with the privilege of participating in the scientific and business sessions of the Society and of voting and holding office. They shall pay annual dues and assessments fixed by the Executive Council, not to exceed the annual dues for Active Members.

Section 9. Revocation or Suspension of Membership. Membership in the Society may be suspended or revoked by a component county society or by the Executive Council where it shall be found that a member of the Society has been guilty of grossly immoral conduct, or of producing or attempting to produce a criminal abortion, or by false and fraudulent representation has obtained or attempted to obtain practice in his profession, or is habitually addicted to the use of morphine, cocaine, or any narcotic or barbiturate drugs or has by false or fraudulent representation of his professional skill obtained or attempted to obtain money or anything of value or has advertised or held himself out under a name other than his own or has advertised or publicly professed to treat human ailments under a system or school of treatment or practice other than that for which he holds a license, or is guilty of any fraud or deceit by which he was admitted to practice or to membership in this Society or who has been guilty of any unprofessional or dishonorable conduct unworthy of and affecting the practice of his profession, or who has been guilty of any violation of the principles of medical ethics of this Society or of the American Medical Association or who has been convicted in any court, State or Federal, of any felony or of any other criminal offense involving moral turpitude or who has been found guilty by the Board of Medical Examiners of the State of North Carolina of violating the medical practice act or of conduct constituting grounds for suspension or revocation of his license to practice medicine. A transcript of the record of a conviction in any court certified by the Clerk of the Court in which such conviction is had shall be sufficient evidence to justify the suspension or revocation of membership in this Society. A certification by the Board of Medical Examiners of the fact that such Board has found a member guilty of a violation of the Medical Practice Act or of conduct constituting grounds for suspension or revocation of his license to practice medicine shall also be sufficient evidence to justify suspension or revocation of membership in the Society.

On motion, duly made and seconded, Article IV was adopted.

(Final action 1957).

Article V—House of Delegates

The House of Delegates shall be the legislative and business body of the Society, and shall consist of (1) delegates elected by the component county societies, and (2) ex-officio the Past Presidents and Past Secretaries and the officers of the Society as defined in this Constitution.

On motion, duly made and seconded, Article V was adopted.
(Final action).

Article VI—Societies and District Societies

The House of Delegates may provide for a division of the scientific work of the Society into appropriate sections, and for the organization of such councilor district societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

On motion, duly made and seconded, Article VI was adopted.
(Final action).

Article VII—Meetings and Sessions

Section 1. The Society shall hold an annual meeting, during which there shall be held daily not less than one general session, which shall be open to all registered members and to other members as provided under Article IV above.

Section 2. The time and place for holding each annual meeting shall be fixed by the House of Delegates, but in case a change of time or place or both should be considered necessary, the Executive Council shall have authority in the premises.

On motion, duly made and seconded, Article VII was adopted.
(Final action).

Article VIII—Officers

Section 1. The officers of this Society shall be a President, President-Elect, two Vice Presidents, a Secretary-Treasurer, ten Councilors, and the Speaker and Vice Speaker of the House of Delegates and the immediate past President of the Society. The foregoing shall constitute the voting members of the Executive Council.

Section 2. The President, President-Elect, Vice Presidents, Speaker and Vice Speaker of the House of Delegates shall be elected for a term of one year. The Secretary-Treasurer and Councilors and Vice Councilors shall be elected for terms of three years each. All officers shall serve until their successors are elected and installed.

Section 3. The officers of this Society shall be elected by ballot, a majority of the votes cast being necessary to elect, by the House of Delegates at its First regular meeting of the annual session; however, when the nominating committee presents its recommendations for officers with only one name for each office and there are no other nominations, the vote may be taken viva voce. No person shall be eligible to be elected to any such office who is not in attendance upon the annual meeting and who has not been a member of the Society for the past three years. Any nominee for the office of President or President-Elect shall have been an active member of the Society for at least five years, including the year of his election, shall have attended two of the three meetings immediately preceding his nomination, including the meeting at which he is nominated, and shall be a Member in good standing at the time of his nomination.

On motion, duly made and seconded, Article VIII was adopted.
(Final action).

Article IX—The Board of Medical Examiners, The State Board of Health and the Editorial Board of the North Carolina Medical Journal

Section 1. The seven members of the "Board of Medical Examiners of the State of North Carolina" shall be elected by majority ballot of the members present in General Session as follows: Beginning with the annual session of 1962, two members shall be elected for a term of two years,

two members shall be elected for a term of four years, and three members shall be elected for a term of six years. Thereafter, in any two years there shall be elected for a term of six years two or three members as are necessary to replace the members whose terms expire during that calendar year. The election shall be held on the second day of the annual meeting, and the balloting shall continue until the required number is elected.

Section 2. The elective members of the State Board of Health shall be nominated by the Nominating Committee and shall be elected by the House of Delegates to serve for a term of four years, and until their successors shall have been duly elected and have qualified.

Section 3. The seven elective members of the "Editorial Board of the NORTH CAROLINA MEDICAL JOURNAL" shall be elected by ballot in the second General Session of the annual meeting as follows: Three for a period of four years; two for a period of three years and two for a period of two years. The balloting shall continue until the entire number is elected. At the expiration of each successive term, the vacancies shall be filled by ballot in General Session, the members being elected for a term of four years each.

Section 4. A vacancy occurring from any cause, other than the expiration of term of office, in the membership of the Board of Medical Examiners of the State of North Carolina or the Editorial Board of the North Carolina Medical Journal shall be filled by the respective Board or a quorum thereof. A vacancy occurring in the membership of the Board of Health by reason of the resignation, death or disability of any member of such Board elected by the Society shall be filled by election by the House of Delegates or by the Executive Council of the Society between meetings of the House of Delegates. Any member of either of said Boards elected by the Society may be removed by the Society for cause.

On motion, duly made and seconded, Article IX was adopted.

(Final action 1957.)

Article X—Funds and Expenses

Funds for meeting the expenses of the Society shall be arranged for by the House of Delegates by an equal per capita assessment upon each county society, to be fixed by the House of Delegates, by voluntary contribution, and from the revenues from its publications. Funds may be appropriated by the House of Delegates to defray the expenses of the annual meeting, for publication, and for such other purposes as will promote the welfare of the Society, the profession, and the people of the State. No member solely by virtue of his membership in the Society shall be entitled to any financial profit, if any there be, from any activity of the Society.

On motion, duly made and seconded, Article X was adopted.

(Final action).

Article XI—Referendum

The General Session of the Society may, by a two-thirds vote, order a general referendum upon any question pending before the House of Delegates, including an amendment to this Constitution and the House of Delegates may by a similar vote of its own members or after a like vote of the General Session, submit by mail any such question to the membership of the Society for a final vote; and if the persons voting shall comprise a majority of all the members of the Society, a majority of such votes shall determine the ques-

tion, and be binding upon the House of Delegates.

On motion, duly made and seconded, Article XI was adopted.

(Final action).

Article XII—The Seal

The Society shall have a common seal, with power to break, change or renew the same at pleasure.

On motion, duly made and seconded, Article XII was adopted.

(Final action).

Article XIII—Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at that annual meeting, provided: (1) that such amendment shall have been presented in open meeting at the previous annual meeting, and that it shall have been sent officially to each component county society or printed in the official publication of the Society at least two months before the session at which final action is to be taken, or (2) that such amendment shall, by two-thirds vote of the House of Delegates, be submitted to and approved by a general referendum as provided for in Article XI.

On motion, duly made and seconded, Article XIII was adopted.

(Final action).

Dr. McMillan: Mr. Speaker, that ends the Constitution. I wonder if you wish me to keep on in view of the lateness of the hour.

Dr. Dixon: I move we recess so that we have time to eat.

Speaker Murphy: We will reconvene at eight o'clock.

[The session adjourned at five thirty-five o'clock.]

MONDAY EVENING SESSION

April 30, 1956

The meeting reconvened at eight o'clock, Dr. Murphy presiding.

Speaker Murphy: Obviously we cannot proceed with the consideration of the By-Laws at this time, but there are some of these questions about which there is nothing controversial. Suppose we begin with the Committees.

REPORT OF NORTH CAROLINA DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION—JUNE, 1955

The House of Delegates of the American Medical Association met in the American room of the Traymore Hotel, Atlantic City, N. J., June 6 to 10, 1955.

The preliminary report of the Reference Committee on Credentials was that 193 out of 195 Delegates had been seated. Your delegation; namely, Drs. B. O. Edwards, Asheville, Millard D. Hill and C. F. Strosnider, Goldsboro, were included in the Delegates seated. Dr. M. D. Hill was appointed as a member of the Election Clerks Committee and Dr. B. O. Edwards served as a member of the Reference Committee on Rules and Order of Business.

Total registration for our Atlantic City meeting was 31,057 as compared with a total of 42,969 in San Francisco, one year ago. The total physician registration at Atlantic City was 11,546, against 12,063 in San Francisco last year.

Freedom of expression certainly held sway as many important problems facing American medicine for action before the A.M.A. House of Delegates. Osteopathy, medical ethics, intern train-

ing, Hospital accreditation, and Polio vaccine were among the major topics of discussion before the House.

The House of Delegates voted the 1955 Distinguished Service Award of the American Medical Association to Dr. Donald G. Balfour, Surgeon, author and researcher, Rochester, Minnesota, for his outstanding contributions to medicine and humanity. Dr. Balfour has been with the Mayo Clinic since 1907, and he also has been associate director and then director of the Mayo Foundation for Medical Education and Research.

The Osteopathic Issue:

One member of the Reference Committee was completely satisfied that an appreciable portion of current education in the colleges of Osteopathy definitely does constitute the teaching of "CULT-IST" healing, and is an index that the "Osteopathic concept" still persists in current Osteopathic practice.***** He therefore makes the "following recommendations to the House of Delegates.

"1—That the report of the Committee for the Study of Relations between Osteopathy and Medicine be received and filed; and, that the Committee be thanked for its delicate work, and be discontinued.

"2—That if and when the House of Delegates of the American Osteopathic Association, the official policy making body, may voluntarily abandon the commonly so called 'Osteopathic concept,' with proper deletion of said 'osteopathic concept' from catalogues of their colleges; and, may approach the Trustees of the American Medical Association with a request for further discussion of the relations of Osteopathy and Medicine, then the said Trustees shall appoint another special committee for such discussion."

The above recommendations were approved by the House.

Dispensing of Drugs and Appliances by Physicians. (Section 8 of the By-Laws:

It is not unethical for a physician to prescribe or supply drugs, remedies, or appliances as long as there is no exploitation of the patient.)

Miscellaneous Actions:

Commended the Medic television program:
Reaffirmed its previous recommendations that the United States withdraw from the International Labor Organization;

Approved the Headquarters Survey Report, which included the statement that "the only public relation program of any permanent value is the private and public relations of the individual doctor";

Reaffirmed its opposition to extension of the Doctor Draft Law;

Recommended the creation of an A.M.A. Committee on Geriatrics;

Warned against the danger embodied in the state legislative proposals designed to restrict the entire field of visual care to the profession of optometry.

Opening Session

Principal addresses at the Monday opening session of the House of Delegates were given by Dr. Walter B. Martin of Norfolk, Virginia, retiring A.M.A. president, and Dr. Elmer Hess of Erie, Pennsylvania, then president-elect.

Dr. Martin declared that the basic philosophy of medicine has not changed and "our obligation is to bring the best that medicine can offer to the individual patient." Dr. Hess said that the nation's physicians must become leaders in a campaign to "overcome the ravages of mental illness" as well as an "intensive campaign to eliminate the needless blood shed" of traffic accidents.

Inaugural Program

"Medicine's Proclamation of Faith" was the theme of the Tuesday evening program, which was broadcast nationwide by the ABC Radio Network. Dr. Hess, in his inaugural address, said that "unless we are willing to give of ourselves and our faith, our science will avail us little." Dr. Norman Vincent Peale, eminent clergyman who was guest speaker on the inaugural program, pointed out that "the drawing together of medicine and religion is a step in helping man toward proper use of his God-given potentials and qualifications."

Election of Officers

The following officers were elected at the closing session:

Dr. Millard D. Hill, Raleigh, N. C., vice-president
Dr. Dwight H. Murray, Napa, California, the new president-elect

Dr. George F. Lull, Chicago, Illinois, secretary
Dr. J. J. Moore, Chicago, Illinois, Treasurer

Dr. E. Vincent Askey, Los Angeles, speaker of the House of Delegates

Dr. Louis M. Orr, Orlando, Florida, vice-speaker
Dr. Gunnar Gundersen, La Crosse, Wisconsin,

chairman of the Board of Trustees

Dr. James R. Reuling, Bayside, New York, was elected to fill Dr. Murray's term on the Board.

About one year ago your Delegates decided that it was opportune for our State Medical Society to be represented on the A.M.A. Official Staff. Dr. Zack Owens, our Past-President, and Dr. J. W. Norton, our State Health Officer agreed with us and proceeded to co-operate by writing a joint letter of endorsement, of Dr. M. D. Hill for the office of Vice-President of the A.M.A., to each member of the House of Delegates of the American Medical Association. This action was followed by a strenuous personal contact campaign, in behalf of our co-delegate, in the House of Delegates of the American Medical Association. Dr. Hill had competition from the State of Georgia, which had called a special session of its House of Delegates, and presented the name of Dr. Allen for the office of Vice-President of the A.M.A. The Georgia Delegates and their friends conducted an active correspondence and personal campaign in the House. Dr. B. O. Edwards nominated Dr. M. D. Hill, whose nomination was seconded by the following States: Pennsylvania, New York, New Jersey, Wisconsin, Texas, Illinois, Ohio, Virginia, West Virginia and others.

After his nomination for the Vice-Presidency, Dr. Hill resigned his appointment to the Clerks of Election Committee.

Dr. M. D. Hill was elected over Dr. Allen by a vote of 100 to 43.

Dr. M. D. Hill becomes the first officer of this Society ever to be elected as Vice-President of the A.M.A. An honor which we feel is in line with the services rendered to organized medicine in County, City, District, State and National Medicine. Dr. Hill will meet every requirement of the office of Vice-President of the A.M.A. with efficiency, faithfulness and loyalty to all concerned.

Respectfully submitted,
C. F. Strosnider, M.D.)
B. O. Edwards, M.D.) Delegates
M. D. Hill, M.D.)

REPORT OF NORTH CAROLINA DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION— NOVEMBER, 1955

The House of Delegates of the American Medical Association convened in the Statler Hotel Ball room, Tuesday, November 29, 1955 at 10:00 A.M.

All of the Delegates, 195, were seated, among

whom were your Delegates, Drs. B. O. Edwards, Asheville, N. C., who served as Chairman of the Reference Committee on Rules and Order of Business, C. F. Strosnider, Goldsboro, N. C., and M. D. Hill, Raleigh, N. C.

Total registration of 8,637, including 3,779 physicians, attended this meeting. This compared with a total Miami registration last year of 7,707, including 3,253 physicians.

General Practitioner of the Year:

Named as the General Practitioner of the Year was Dr. E. Roger Samuel, of Mount Carmel, Pa., whose selection by a special committee of the Board of Trustees was announced at the opening session on Tuesday. Dr. Samuel, a former member of the House of Delegates; and, a general practitioner for 35 years.

Addresses:

Dr. Vincent Askey, Speaker of the House made an excellent address suggesting methods of expediting the business of the House. Dr. Elmer Hess, A.M.A. President, told the opening session of the House that complacency should be regarded as the medical profession's greatest enemy. Although good progress is being made in informing the public and the profession of the objectives of organized medicine, he said, educational efforts must be intensified and the list of physicians' tangible accomplishments for the health benefit of the public must be increased.

New Business:

Seventy-seven, plus, resolutions were introduced into the House. These resolutions were referred to the Reference Committees for study and report back to the House with recommendations.

The Student A.M.A. made its report thru its President and Secretary. Secretary George Lull, reported that the membership of the A.M.A., as of June 30, 1955 was 155,878. It was announced that the Clinical Session will be held in Minneapolis, Minnesota in 1958.

Social Security, the report of the Committee on Medical Practice, Grievance Committees and revision of the code of medical ethics were among the major subjects of discussion and action by the House of Delegates of the American Medical Association's Ninth Clinical Meeting.

Social Security:

Major Legislative policy action taken at the Boston meeting involved H.R. 7225, known as the Social Security Amendments of 1955. The House of Delegates adopted a substitute resolution by the Reference Committee on Legislation and Public Relations to combine the intent of the four resolutions and three supplementary reports of the Board of Trustees dealing with H.R. 7225 and other aspects of Social Security. The substitute resolution stated the following policy:

"That the American Medical Association reiterate in the strongest possible terms its determination to resist any encroachment upon the American system of medical practice which would be detrimental to our patients, the American people:

"That the American Medical Association urge and support the creation of a well-qualified commission, either governmental or private or both, to make a thorough, objective and impartial study of the economic, social and political impact of Social Security, both medical and otherwise, and that the facts developed by such a study should be the sole basis for objective non-political improvements to the Social Security Act, for the benefit of all of the American People;

"That the American Medical Association pledges its wholehearted cooperation in such a

study of the Social Security in the United States, and will devote its best efforts to procuring and providing full information on the medical aspects of disability, rehabilitation and medical care of the disabled, and

"That copies of this resolution be transmitted to the President of the United States, to all members of the Cabinet, to all members of the Congress, and to all constituent state medical associations."

OASI Coverage of Physicians

In another action on social security, the House passed the following resolution designed to determine the exact attitude of physicians toward compulsory or voluntary coverage under the Social Security system:

"Whereas, Misunderstanding exists about the position of the medical profession on the question of the inclusion of physicians in the Old Age and Survivors Insurance provisions of the Social Security Act; therefore be it

"Resolved, That the House of Delegates of the American Medical Association recommend to the state societies that they poll their entire membership on this question and that the result of the poll be transmitted to the Board of Trustees of the American Medical Association as soon as possible."

Report on Medical Practices

The House passed a substitute resolution offered by the Reference Committee on Insurance and Medical Service.

"That a continuing Committee on Medical Practice be created in the American Medical Association to conduct a study of the relative value of diagnostic, medical and surgical services and to report its findings and recommendations to this House in the same manner as is now followed by other committees and councils of the Association;

"That this committee shall consist of five members of the House appointed by the Speaker, three of whom shall be general practitioners;

"That this committee be directed to utilize all possible means to stimulate the formation of a department of general practice in each medical school;

"That the American Medical Association approve of the medical school teaching programs which afford the medical student opportunity for experience in the general practice of medicine;

"That the representatives of the American Medical Association on the Joint Commission on Accreditation of Hospitals be instructed to stimulate action by that body leading to the warning, provisional accreditation or removal of accreditation of community or general hospitals which include arbitrarily restrict hospital privileges for generalists as a class regardless of their individual professional competence, after appeal to the Commission by the County Medical Society concerned;

"That the committee cooperate in every way and assist the Public Relations Department of the American Medical Association to present a program of public education designed to bring about a better understanding of all fields of medical practice, and

"That this committee use its full influence to discourage any arbitrary restrictions by hospitals against general practitioners as a group or as individuals."

In a complementary action on the same subject, the House also approved a supplementary report of the Board of Trustees which included the following suggestions:

1. All non-surgical groups should be asked for

their suggestions and cooperation in carrying out a public education program on the value of diagnostic and medical work.

2. The various speciality boards should be encouraged to reappraise the practice restrictions on their board diplomates.

3. The American Medical Association should continue to discourage arbitrary restrictions by the hospitals against general practitioners.

4. Organized medicine is "ready, willing and able to solve satisfactorily its own problems, and such assurance should be given to the American Medical Association or any other group concerning itself with such problems."

Miscellaneous Actions

Among many other actions on a variety of other subjects, the House of Delegates also:

Recommended that the Board of Trustees give consideration to a dues increase for all association members, with the increase designated for contribution to the American Medical Education Foundation;

Adopted a resolution on the practice of pathology declaring opposition to "the division of any branch of practice into so-called technical and professional services";

Recommended that further purchases and distribution of Salk polio vaccine be carried on by the presently available commercial avenues used for other immunizing agents, and that all vaccines, once proven, should enter the usual channels of distribution;

Approved appointment of an A.M.A. committee to study the prevention of highway accidents;

Commended the Women's Auxiliary of the A.M.A. for its financial contributions in support of medical education and requested the Auxiliary to continue its active efforts;

Received progress reports from the Commission on Medical Care Plans and from the A.M.A. Law Department on its studies of professional liability;

Approved a Board of Trustees recommendation that the State Journal Advertising Bureau be separated from the American Medical Association and be given full autonomy;

You will find the Proceedings of the Boston Clinical Meeting in the Journal of the A.M.A., dated December 31, 1955—Pages 1748 to 1774, inclusive.

Respectfully submitted,

B. O. Edwards, M.D.)
M. D. Hill, M.D.) Delegates
C. F. Strosnider, M.D.)

P. S. We the undersigned fellow delegates want to thank Dr. B. O. Edwards (whose term of office as Delegate to the A.M.A. House of Delegates expired December 31, 1955), for the privilege of having him cooperate with us in serving organized medicine thru our State Medical Society and the American Medical Association thru its House of Delegates.

Millard D. Hill, M.D.
C. F. Strosnider, M.D.

ANNUAL REPORT OF COUNCILORS

Report of First Medical District

The past year has been one of success and harmony throughout the district.

The officers are: President, Dr. L. P. Williams, Edenton, N. C., Secretary-Treasurer, Dr. A. M. Stanton, Edenton, N. C.

We have held four District Medical Society Meetings, which were very instructive and well attended.

The six Postgraduate Meetings sponsored by the First District Medical Society and given through the Extension Division of the University of North Carolina Medical School were of much value.

Respectfully submitted,
T. P. Brinn, M.D.
Councilor,
Hertford, N. C.

Report of Second Medical District

There have been no unusual happenings within the Second Medical District during the past year. The Society met with the Carteret County Medical Society in Morehead City in November 1955 with good attendance and pleasant fellowship. Dr. W. C. Sealy gave a very instructive talk on surgical conditions of the heart.

There has been a continuing increase in the number of physicians locating within the district to the great benefit of the medical needs of the area. These accessions to membership have readily entered into the affairs of organized medicine.

Respectfully submitted,
Frederick P. Brooks, M.D.
Second District Councilor

Report of Third Medical District

A doctor in the Third District has been charged with illegal procurement of narcotics. He was tried and lost his narcotics license. Upon checking license record we did not find him to be a member of the Medical Society of the State of North Carolina.

A regular fall meeting of the Third District Medical Society was held in Wilmington with excellent programs and good attendance.

The Spring Meeting of the Third District Medical Society, at which the officers are elected, has not been held. This meeting is now planned for mid-April at Lake Waccamau.

Respectfully submitted,
D. H. Bridger, M.D.
Third District Councilor

Report of The Fourth Medical District

The following categorical report is made:

1. I have visited all but one of the societies in my District.
2. I have met with several Auxiliary Societies in my District.
3. I have visited all members in hospitals that I knew about.
4. I have attended the funeral of the members who have passed, that I knew about.
5. I have visited three members who were reported to be drinking too much.
6. I have investigated two members who were irregular with the handling of narcotics.
7. I have investigated two members who were reported to have refused to attend emergency cases.

I think that all these matters are smoothed out now.

Respectfully submitted,
Henderson Irwin, M.D.
Fourth District Councilor

Report of The Fifth Medical District

I am making the following report to you as Councilor of the Fifth District:

Until the present time I have not had a complaint from any Society within the District this year.

Our local trouble in Rockingham, Richmond County, has continued to improve and the Society as a whole has a much better atmosphere and spirit of cooperation.

The two doctors in question have received the

recommendations (of the Committee on Mediation) from the State Medical Society and are still considering the recommendations. However, there is a big financial problem that must be taken in consideration and may prevent a partnership such as suggested.

During the year I have attended all meetings of the Executive Council in Raleigh, except one. The material has been carefully studied and passed on to the counties in my District. The various legislative bills before the present Congress were discussed before the Fifth District doctors at our regular full day meeting at Pinchurst, North Carolina, on December 5, 1955.

Each County Society President and Secretary have been sent a copy of telegraphic information and they were advised to have each member communicate his personal views to the Senators in regard to matters pending in the Congress.

During the Poliomyelitis Vaccine discussion, I contacted each County Society President in my District, also each County Society Secretary, and had a 100% reply which data I telephoned to the Executive Secretary during the Executive Council meeting of the 29th of January 1956, when I found it impossible for me to attend the Council meeting as schedule and as I had planned.

So far I have been unable to meet with each county society, except during the course of the Fifth District Medical Society meeting in December, but since I was the President of the Fifth District Medical Society I used every opportunity during the full-day-meeting to acquaint the various doctors with the program and aims of our State President.

Respectfully submitted,
Ralph B. Garrison, M.D.
Fifth District Councilor

Report of The Sixth Medical District

The various Societies comprising the 6th District of the Medical Society of the State of North determined the sentiment of the membership to Carolina have individually and collectively experienced a good and harmonious fellowship during the year. The Councilor at the request of the President made inquiry concerning the amount of Salk Vaccine available in the various county Health Departments and among the doctors and ward the problem of the distribution of this vaccine. This report was submitted to the Executive Council for their information.

The 6th District Annual Meeting was held on October 5, 1955 at Camp Butner. It was well and enthusiastically attended. The speakers on the Program rendered uniformly high caliber Papers which provoked interesting and understanding discussions. The outgoing officers were: Dr. C. T. Wilkinson, President; Dr. W. B. Burwell, Vice-President; and Dr. Robert N. Creadick, Secretary-Treasurer. The Officers elected for the current year were: Dr. L. E. Fields, President; Dr. L. F. Hart, Vice-President; and Dr. Seth Hobart, Jr., Secretary-Treasurer.

During the year several complaints and grievances have been investigated at the request of the Mediation Committee. Fortunately none of these have been of a serious nature. The Councilor has attended each of the meetings of the Council.

Respectfully submitted,
G. W. Paschal, Jr., M.D.
6th District Councilor

Report of The Seventh Medical District

The fall meeting of the Seventh District Medical Society was held in Wadesboro, North Carolina, on November 16, 1955. The meeting was well attended. An excellent program was presented by Dr. Frederick Taylor of Charlotte; Dr. Myron Sandifer and Dr. Ernest Craige of the University of North Carolina School of Medicine; Mr. James W. Powell of the North Carolina State Bureau of Investigation; Dr. James P. Rousseau, President of the State Society, of Winston-Salem, and; Dr. Bruce Logue of the Emory University, Atlanta, Georgia.

The Seventh District Medical Society held a joint meeting with Tri-State Medical Society on February 19 and 20, 1956, in the city of Charlotte, North Carolina. An interesting and informative scientific program was presented at this meeting.

During January, 1956, representatives of each of the county societies of the district were consulted regarding the poliomyelitis vaccination program of each county. This report was presented to the Executive Council of the State Society at its meeting in Raleigh on January 29, 1956.

During the year only one complaint was received from the Seventh District by the grievance committee of the State Medical Society. This was apparently settled satisfactorily on a local level.

The North Carolina representatives in the United States Senate and of the House of Representatives have been contacted on several occasions regarding proposed legislation of interest to the medical profession in relation to its responsibilities for the health care and services to the people of the State.

Respectfully submitted,
Leslie M. Morris, M.D.
Seventh District Councilor

Report of The Eighth Medical District

The Eighth District, I am glad to report, has had no serious difficulties and has been running quite smoothly, except that the Ashe-Watauga Society has under consideration the possibility of requesting that they be allowed to separate and to organize individual County Societies. This situation was investigated by Dr. Harry L. Johnson, Vice Councilor, and the Society was advised as to procedure if they definitely decide to separate.

Respectfully submitted,
M. D. Bonner, M.D.
Eighth District Councilor

Report of The Ninth Medical District

The affairs of the Ninth Medical District have progressed in a harmonious manner during the year. The Annual Meeting of the Ninth District Medical Society was held at Mooresville, North Carolina, on September 29, 1955, and was well attended. The program was arranged by doctors of the Mooresville area and was presented by members of the faculty of Duke University School of Medicine, the Bowman Gray School of Medicine and by the physicians of the District.

The 1956 meeting of the Ninth District Society will be held in Statesville, North Carolina, and, therefore, the officers chosen are: Dr. J. T. Stegall, president; Dr. J. S. Holbrook, vice-president; and; Dr. David Pressly, secretary and treasurer.

The Extension Division of the University of North Carolina again conducted postgraduate courses in the fall of 1955. The course was well attended, particularly in the western division of the Ninth District, and in the adjacent counties of the Tenth District.

I wish to express my appreciation for the many

considerations that have been shown me by the various counties within the past year.

Respectfully submitted,
John C. Reece, M.D.
Ninth District Councilor

Report of The Tenth Medical District

The affairs of the Tenth District are alright. We have had regular meetings of each of our County Societies.

There is no friction or ill will among our Members anywhere.

Our District Medical Society Meetings are held semi-annually, with one meeting (the spring, usually in April) held outside of or away from Asheville and a fall meeting held in Asheville (usually in October) during which we have a very fine one-day symposium with a very fine program. These meetings are both well attended and are of much benefit.

The Councilor and officers of the Tenth District Medical Society hereby extends to all doctors in the entire State an invitation to attend the fall meeting in October 1956.

Respectfully submitted,
W. A. Sams, M.D.
Tenth District Councilor

Committee To Work With The North Carolina Industrial Commission

The relationship between this Committee and the North Carolina Industrial Commission continues to be an agreeable and understanding one. The number of contested cases sent to this Committee for joint discussion with the Industrial Commission has been reduced to about one-fifth the number reviewed three years ago. It is anticipated that another adjustment in the fee schedule will be made within the next year.

At the present time we are trying to work out some fairly uniform method and standard for rating disabilities resulting from industrial injuries with particular reference, at the moment, to back cases. In regard to this problem we are attempting to correlate information from Orthopedists and Neurosurgeons throughout the State and then correlate this material with data we have available from other states.

Many of the minor problems relating to the Industrial Commission which have been presented to us by physicians have been worked out by our Committee.

The Committee discussed the problem of intervention by a third party between the patient and the physician of his choice in Industrial cases with Mr. Bean, chairman of the Industrial Commission, at the last meeting on February 2nd, 1956 and Mr. Bean assured us that at no time did the Industrial Commission deny patients a free choice of physicians.

Wm. F. Hollister, M.D., Chairman
Pinehurst
John B. Anderson, M.D., Asheville
John W. Baluss, Jr., M.D.,
Fayetteville
Richard McC. Taliaferro, M.D.,
Greensboro
Guy L. Odum, M.D., Durham
Charles T. Wilkinson, M.D.,
Wake Forest
Thomas G. Thurston, M.D., Salisbury

Committee On Child Health

The Committee on Child Health (formerly Child Welfare) at its meeting of September 17, 1955 at Roaring Gap, decided upon a study of neonatal deaths in all North Carolina hospitals which have

500 or more living births annually. Infants who die under 28 days of age are to be reported regardless of the place of birth. A budget of \$1,067 was approved by the Executive Committee of the Medical Society.

Such a study has begun with 100% cooperation of the medical and administrative staffs of the 70 hospitals involved. It is the hope of the committee that analysis and use of the information which is obtained may aid in lowering the neonatal mortality in North Carolina, and that the survey can be continued and widened in future years.

Dr. A. H. Elliott and members of his staff have rendered invaluable aid in this study, and so has Dr. Bernard G. Greenberg of the School of Public Health of the University of North Carolina.

Angus M. McByrde, M.D., Chairman
Durham
Edward C. Curnen, Jr., M.D.,
Chapel Hill
Roy D. Daniel, M.D., Sylva
Donnie H. Jones, Jr., M.D.,
Princeton
J. Buren Sidbury, Sr., M.D.,
Wilmington
F. A. Blount, M.D., Winston-Salem

Committee on Tuberculosis

It is the majority opinion of this Committee that an effort should again be made to encourage general hospitals throughout this state to include routine chest films as a part of the admission examination of every patient. If the State Medical Society should see fit to endorse such a program which has already been endorsed by many national organizations, such approval would encourage more hospitals to consider the adoption of such a program.

Joseph S. Hiatt, Jr., M.D., Chairman
Southern Pines
Wm. M. Peck, M.D., McCain
Herman F. Easom, M.D., Wilson
John M. Futrell, M.D., Smithfield
Merle D. Bonner, M.D., Greensboro
John C. Wiggins, Jr., M.D.,
Winston-Salem

Committee On Scientific Work

In submitting for the review of the Executive Council and House of Delegates Annual Report of activities of this Committee, it should be said that this function has not been greatly involved during the activity year inasmuch as the scientific work of the Society is principally conducted during the course of the Annual Sessions during which the eleven scientific sections authorized by the House of Delegates establish special programs for the various specialty sections bringing to the Annual Sessions one of the finest scientific programs in the country. Together with this effort on the part of the eleven scientific section chairmen and their advisors within the specialty and the invitations on behalf of the Society by the President of the State Medical Society, a well rounded scientific program has been devised for the 1956 Annual Sessions of the State Medical Society. In addition to these activities, it should be commented that the Committee on Audio-Visual Postgraduate Instruction courses apparently has organized a very satisfactory program which will be put into effect from Sunday afternoon, April 29th and extend until Monday afternoon, April 30th. This is a valuable scientific adjunct to the regular programs which have traditionally been a part of the Annual Sessions program of the State Medical Society.

We should comment that the integration of these programs have been a task devolving largely upon the staff of the Headquarters Office of the State Medical Society and such program as will appear as preliminary in the March issue of the North Carolina Medical Journal along with the official program which will be completed and published in early April constitutes a full and complete planning for the 1956 Annual Sessions and it is commended to the officials of the State Society and particularly to the membership of same.

Edward W. Schoenheit, M.D.,
Chairman, Asheville
James P. Rousseau, M.D.,
Winston-Salem
Millard D. Hill, M.D., Raleigh
Donald B. Koonce, M.D., Wilmington
Lenox D. Baker, M.D., Durham
Julian C. Brantley, M.D.,
Rocky Mount
George R. Miller, M.D., Gastonia

Committee On Eye Care

No problems have been referred to this Committee for action. No meetings have been held.

Alan Davidson, M.D., Chairman
New Bern
Horace M. Dalton, M.D., Kinston
R. Winston Roberts, M.D.,
Winston-Salem
Walter C. Humbert, M.D., Greenville
John D. Wilsey, III, M.D.,
Winston-Salem
Louten R. Hedgpeth, M.D.,
Lumberton
E. E. Moore, M.D., Asheville

Committee on Coroner System

Since the Committee for 1954-55 was instrumental in the enactment by the General Assembly, of Chapter 972, Public Laws of 1955, providing for Postmortem Medicolegal Examinations, the Committee for 1955-56 decided that it should endeavor to familiarize the public, especially County Commissioners, with the provision of the law.

Accomplishments

1. The Committee requested the Governor to appoint a newspaperman as the lay-member of the Committee on Postmortem Medicolegal Examinations. The Governor appointed Mr. Holt McPherson, Editor of the High Point Enterprise.

2. A letter was written to the Chairman of the Boards of County Commissioners, enclosing a copy of the Law, together with an analysis of the Law by the Institute of Government. A letter was written to the Secretary of the Local Medical Societies, requesting that they appoint a Committee to study the Law so that they might confer with the County Commissioners. A letter was also written to the Local Health Officers.

3. The Committee requested the Executive Council of the Medical Society of the State of North Carolina to approve travel expense and honorarium for an authority on Medicolegal Examinations to address the Annual Meeting of the North Carolina County Commissioners Association in Winston-Salem next August. This request was approved.

As of February 29th the Board of Commissioners of Union County and Cumberland County had passed Resolutions placing these Counties under the Law. Randolph, Mecklenberg, Durham, New Hanover, Forsyth and Halifax Counties have manifested interest in the Law. It is probable that the County Commissioners of some of these counties may act favorably.

Recommendations for Activities of the Committee on the Coroner System for 1956-57

1. Continuation of efforts to interest Boards of County Commissioners in the Postmortem Medicolegal Examination Law.

2. Recommend to the Committee on Postmortem Medicolegal Examinations the appointment of medical examiners for each county, even though the board of County Commissioners had not adopted the Law and inquire of the County Commissioners if such provisional Medicolegal Examiner would be acceptable.

3. Organize a Course of Instruction for both legally authorized Medical Examiners and provisionally appointed Medical Examiners and Coroners by the Institute of Government at Chapel Hill.

John H. Hamilton, M.D., Chairman
Raleigh
Ernest H. Yount, Jr., M.D.,
Winston-Salem
John P. U. McLeod, M.D.,
Marshville
Nathan A. Womack, M.D.,
Chapel Hill
Wm. Rancy Stanford, M.D., Durham
John C. Young, M.D., Asheville
J. Deryl Hart, M.D., Durham
Hunter McG. Sweaney, M.D.,
Durham
J. Grover Raby, M.D., Tarboro
Howard M. Starling, M.D.,
Winston-Salem
John W. Allgood, M.D., Greensboro
John W. Morris, M.D.,
Morehead City
John C. Reece, M.D., Morganton

Committee On Eye Bank

Your Committee has continued to observe with interest the activities of the Eye Bank for Restoring Sight, Inc. Under the leadership of the Chairman, Mrs. H. R. Borthwick, this organization acts as a clearing station for individuals desiring to donate their eyes postmortem to the Eye Bank and conducts an active educational campaign promoting such bequests. A recent letter from Mrs. Borthwick states that "supported by a foundation," the Eye Bank will now have a full time secretary. Presumably the organization will become more active. Mrs. Borthwick and her organization have been most cooperative with this Committee in the single instance in which a conflict of interests arose; i.e., in the selection of speakers scheduled to appear before civic organizations. It is hoped that this amicable relationship will continue.

Wm. Banks Anderson, M.D.,
Chairman, Durham
J. David Stratton, M.D., Charlotte
Alan Davidson, M.D., New Bern
Edward E. Moore, M.D., Asheville
John D. Wilsey, III, M.D.,
Winston-Salem

Committee Advisory To Student AMA Chapters In North Carolina

I should like to report the activity of the committee for the coordination of the Student AMA Chapter of the State of North Carolina.

The members of the committee have acted as consultants to the Student Chapter of the AMA in their respective institutions and have attempted to improve the personal relationship between the students and the respective faculties. The committee has recommended to the Medical Society that funds be made available to assist the president

of each Student Chapter to attend the Medical Convention.

Charles E. Flowers, Jr., M.D.
Chairman, Chapel Hill
Richard T. Myers, M.D.,
Winston-Salem
James P. Hendrix, M.D., Durham

Committee To Study Care And Control Of Chronic Illness

This committee has had only one meeting during the year. It was held on July 24, 1955 in the offices of the Society. As guest of the committee, Dr. John Ferrell of the North Carolina Medical Care Commission was present. He discussed the availability of Federal funds to the states on a fifty per cent matching basis in providing facilities for the care of the chronically ill.

In discussing the prevalence of chronic sickness it was pointed out that in North Carolina there are very few institutions specializing in the care of these patients. The committee recognizes a very definite need for improved facilities. It was agreed that the problem of the chronically ill is a vast and growing one and one that deserves the active and sympathetic interest of the profession.

The committee recognizes the close relationship of the care of the chronically diseased patient and that of rehabilitation in general. It was felt that rehabilitation may best be carried on in certain centers of the state, particularly in relationship with our medical centers and in centers of population, but that the care of the chronically ill should be regarded as a local problem and may best be met by additions to the community hospitals—operated in such a way that the service can be furnished at much less cost to the patient.

Letters were sent to the county commissioners in several counties of the state urging that consideration be given to conversion of Tuberculosis Hospitals—that are being abandoned for that purpose in those counties—into institutions for the treatment of chronic diseases. It seems that in at least two of the counties, Guilford and Forsyth, the matter has received some favorable consideration.

The committee urges continued interest by our Society in this, possibly, medicine's greatest future problem. We have found that the North Carolina Medical Care Commission is willing to cooperate in a most helpful way with any activity that the Society wishes to inaugurate in this direction.

Wm. M. Coppridge, M.D., Chairman
Durham
J. Street Brewer, M.D., Roseboro
John R. Kernodle, M.D., Burlington
Merle D. Bonner, M.D., Greensboro
John L. Winstead, M.D., Greenville
Lenox D. Baker, M.D., Durham
Robert J. Reeves, M.D., Durham
Melvin Webb, M.D., Burnsville

Committee On Professional Liability Insurance (Ad Hoc)

After much investigation and discussion this committee negotiated with the Saint Paul-Mercury Indemnity Company an agreement which promises to provide desirable coverage for the Members of the Medical Society of the State of North Carolina.

This agreement was presented to the Executive Council in January 1956. It was approved and adopted by the Council. An outline of the plan is given below, as an appendix to this report.

Professional damage suits are increasing rapidly, the awards are becoming tremendous and the insurance companies are ever more reluctant to

write this type of coverage. It is most urgent that a program to control the hazard be instituted promptly.

The plan is sound but it can succeed only if the Society, through the Insurance Committee and the Executive Office pursue it with intelligence and vigor. If it is not to receive the constant and unqualified support of the society it would be better not to undertake it at all.

G. W. Murphy, M.D., Chairman
Asheville
George W. Paschal, Jr., M.D.,
Raleigh
Alban Papineau, M.D., Plymouth
Thomas E. Forbes, M.D., Reidsville
Wm. T. Pettus, Jr., M.D., Charlotte
Wm. H. Boyce, M.D., Winston-Salem

APPENDIX: To Report of Committee on Professional Liability Insurance (Ad Hoc)

Proposed Professional Liability Insurance Plan for the Medical Society of the State of North Carolina.

An Outline

1. The Company: Saint Paul-Mercury Indemnity Company, 111 W. Fifth Street, St. Paul 2, Minnesota.

2. The Plan: a. The furnishing of adequate coverage by a very desirable company. b. A comprehensive educational program for society members as to the cause, prevention and management of claims; to be conducted jointly by society and company.

3. No requirement as to fixed percentage of membership of society which must participate.

4. Insurance available to all society members in good standing. The case of any member of questionable desirability will be referred to Insurance Committee for review and discussion before insurance is denied or cancelled.

5. A thirty day cancellation clause will be in effect.

6. Will be sold as individual policies by the one hundred and twenty-five company agents in North Carolina.

7. A basic unit of \$5/15 000, with limits up to any amount, will be available.

8. A comprehensive policy covering professional liability, exposures other than the regular professional pursuits of the physician, his family and employees, and covering occurrences in hospital, clinic and office not directly connected with professional practice is highly recommended by the Society; However, professional liability alone will be available to those members who wish it.

9. Rates will be those presently accepted by the North Carolina Insurance Department as applied to all branches of medicine, to partnerships and to assistants and technicians.

10. When the program has been in effect for 18 months, and periodically thereafter, a review of loss experience in North Carolina will be made and rates adjusted accordingly, subject to approval of North Carolina Bureau of Insurance.

11. Investigation of claims will be by the trained staff of company. Defense of suits will be by attorneys mutually satisfactory to society and company.

12. Claims will not be settled by the company without the consent of the insured or unless the approval of the Society Insurance Committee has been given.

13. All claims reported to the company will be reported to the Insurance Committee for review and consultation.

14. The Society part of program will be handled through the office of Executive Secretary and under the direction of the Insurance Committee from the society.

15. Members of the society will serve as consultants and expert witnesses under the direction of the Insurance Committee.

16. The company agrees to pay expert witness fees to members so utilized. If the company considers such fees excessive, they will be referred to the Insurance Committee for adjudication.

17. Similar plans have been adopted in Oklahoma, Minnesota, Washington, D. C., Virginia and Georgia. Considerable reduction of rates has occurred in Oklahoma and Minnesota; the two states where sufficient time has elapsed for such reductions to occur.

Major Advantages

1. A stable source of professional liability insurance in a widely fluctuating situation.

2. A most desirable educational campaign for members to be conducted jointly by society and company.

3. A rate structure to be geared to loss experience in North Carolina (not country as a whole) with the prospect of reduction in rates.

4. An organized system for investigation and defense with skilled investigators and defense attorneys and utilizing the potentialities of the society itself.

5. A considerable degree of control may be exercised by the society.

Your committee recommends the adoption of this program. The comment is offered that its success will be in direct ratio to the intelligence and vigor with which the Insurance Committee of the society performs its function.

G. W. Murphy, M.D., Chairman
Asheville

George W. Paschal, Jr., M.D., Raleigh

Alban Papineau, M.D., Plymouth

Thomas E. Forbes, M.D., Reidsville

William T. Pettus, Jr., M.D.,

Charlotte

William H. Boyce, M.D.,

Winston-Salem

Approved for the Medical Society of the State of North Carolina by:

Millard D. Hill, M.D.

Approved for the Saint Paul-Mercury Indemnity Company by:

John C. Parrish

Committee On Cancer

The Cancer Committee met in Charlotte, Saturday night, October 23, 1955, during the annual meeting of the North Carolina Division of the American Cancer Society. Eleven out of the twelve committee members were present. Also attending were Dr. J. W. R. Norton, State Health Officer; Dr. A. H. Elliot, State Board of Health; and Mr. W. N. Hilliard, Executive Assistant to the Medical Society of the State of North Carolina.

At this meeting, some changes were made in the recommended requirements for certification for hospitals to care for indigent cancer patients. The following motion being finally made and passed: That indigent cancer patients may be taken care of in approved hospitals where there is qualified use of radium and an approved consulting radiologist.

During this meeting, an approval was given to Cancer Symposia given by the Home Demonstration Clubs in several regions. It was also agreed that the nearest member of the Cancer Committee

would be responsible for furnishing local doctors (M.D.s) for speakers at these symposia.

Dr. James Marshall, Vice Chairman of the Committee and Chairman of the Professional Education Committee of the North Carolina Division, requested approval of further contact with the Dental Profession for the stimulation of education in oral cancer in the dental profession. Also for the same support for nursing education, both graduate nurses and student nurses.

Approval was given for appointment of representatives to the Co-ordinating Committee to work as a liaison group between the Cancer Committee of the State Medical Society, the North Carolina Division of the American Cancer Society and the State Board of Health. It was requested that the representatives of the Cancer Committee to this Co-ordinating Committee consider two problems: First, the improvement of facilities for cytology; and, second, whether changes in the detection and diagnostic clinics were thought indicated. The Committee unanimously approved of the idea of a cytology program similar to that of the Wasserman examinations now done by the State Laboratory when and if it becomes practical.

The Committee meeting closed with a sense of accomplishment which had not been obvious in the past.

On January 24th, a report was received from Dr. James F. Marshall as Chairman of the above described Cancer Co-ordinating Committee. The representatives from the Cancer Committee of the State Medical Society being Dr. James F. Marshall; Dr. Hubert Poteat, and Dr. Joshua Camblos. In this report it was recommended by the Co-ordinating Committee that the Cancer Detection and Diagnostic Clinics be continued and that those localities wishing to establish such clinics and in which there is criticism of the diagnostic clinics, that this aspect of the program could be dropped in those localities. In regard to the Papanicolaou project, it was felt that at this time it was not feasible to establish such a program although the possibility of it in the future should be kept in mind. The proposed meeting of the Cancer Committee to be held in February was not called but a report of the Co-ordinating Committee was mailed to each member for comments. Those comments received were favorable to the report.

Following the above mentioned approval, seven or eight lay symposia on cancer were held by Home Demonstration Clubs in different regions through the combined facilities of the Medical Society's Rural Health Consultant, Mrs. Annette Boutwell, and the Field Representative from the North Carolina Division of the American Cancer Society, Mrs. William Alexander. At each of these meetings a local doctor spoke and was well received. It was felt that these meetings were very helpful from a public relations' point of view, as well as helpful to lay cancer education.

For sometime the failure of the Cancer Home in Lumberton to measure up to expected value has been a sore problem with both the North Carolina Division of the American Cancer Society and the State Medical Society. It has been felt all along that if this Home could be connected with a teaching institution where some definitive care could be given the patients and the stigma of hopelessness removed a great deal more would be accomplished.

Dr. John Kernodle, President of the North Carolina Division informed the Chairman of the Cancer Committee that it was believed that the State Legislature might lend a kind ear towards the establishment of a similar home connected with a

teaching institution with the idea that it would eventually replace the present Home. The individual members of the Cancer Committee were polled by telegram on March 14, 1956. Unanimous approval was immediately received and the following letter was mailed by the Chairman to Mr. John Larkins, a member of the Executive Committee of the North Carolina Division, with a copy to the President of the State Medical Society:

"Mr. John Larkins
Trenton, North Carolina

"Dear John:

"I have recently polled by wire the Cancer Committee of the State Medical Society as follows:

'May I have your approval or disapproval as a member of the Cancer Committee of possible request of State Legislature for establishment of Home for terminal care of indigent cancer patients connected with one of teaching institutions which would in time replace Home in Lumberton.'
(signed: Dr. Donald B. Koonce)

"I have had unanimous approval of the committee with the distinct understanding that it will be a Home for the care and treatment of terminal and indigent cancer patients only. I, personally, approve very much of this project and will be glad to help in any way that I may." (Signed by the Chairman)

The feeling seems to be unanimous among the members of the Cancer Committee of the State Medical Society that there is a better feeling and more sense of cooperation between this group and the North Carolina Division of the American Cancer Society than there has been in many years. It is sincerely felt that no phase of the medical care of cancer patients in this state has been undertaken or considered without the opinion of the Cancer Committee. A great deal of credit can be given for this new understanding to the officers and personnel of the North Carolina Division. We all look forward with great hope to the accomplishments of the next few years of the Medical Society of the State of North Carolina, the North Carolina Division of the American Cancer Society and the North Carolina State Board of Health.

Donald B. Koonce, M.D., Chairman
James F. Marshall, M.D.
Charles I. Harris, M.D.
H. Fleming Fuller, M.D.
Corbett E. Howard, M.D.
Joshua F. B. Camblos, M.D.
Hubert McN. Poteat, Jr., M.D.
Robert J. Reeves, M.D.
Carl V. Tyner, M.D.
Irrving E. Shafer, Sr., M.D.
Wm. H. Pettus, Jr., M.D.
Harry D. Riddle, M.D.
James J. Richardson, M.D.

Report Of The Advisory Committee To The Auxiliary

The Auxiliary under the able leadership of its President, Mrs. Rose (R. D.) Croom of Maxton and her co-workers have completed a very successful year. The projects for 1955-1956 have been as follows:

1. Maintenance of Sanatoria Beds:
 - a. McCain Bed, McCain
 - b. Stevens Bed, Black Mountain
 - c. Cooper Bed, Wilson
 - d. Yoder Bed, Chapel Hill
2. Contributions to:
 - a. Student Loan Fund
 - b. Endowment Fund for Yoder Bed (Cooper, McCain and Stevens have been completed)
 - c. American Medical Education Foundation
3. Sponsor the Doctors' Insurance Program.
 - a. Encourage all doctors to join; to procure literature and display in every way possible.
 - b. Educate the public concerning this insurance plan.
4. Sponsor the Rural Program in North Carolina
 - a. Continue work of actively promoting the formation of County Health Councils.
 - b. Co-operate with the Medical Society in demonstrations in North Carolina counties. The Rural Health Program is based upon the principle of helping people to help themselves. Our active participation is important in strengthening a program which affects the health of two-thirds of our population.
 - c. Attend the Annual Rural Health Conference which is being sponsored by the Medical Society this year. It meets in Raleigh, October 11, at the Hotel Sir Walter.
5. Encourage every doctor and eligible member of his family to vote.
6. Co-operate with Mr. William Hilliard, Public Relations' Director, in his plans for bringing about better understanding among doctors and other groups.
7. Co-operate with Student Nurse Recruitment Campaign.
 - a. Urge qualified young women to become Registered Nurses.
 - b. Encourage interested girls to join the "nursing team" by training to become practical nurses.
8. Promote Health Education by:
 - a. Placing *Today's Health* in school libraries, beauty shops, doctors' and dentists' offices to more widely disseminate to the public, authentic knowledge on health subject.
 - b. Furnishing recorded programs on health subjects to local radio stations.
 - c. Sponsoring contests on health subjects.
The title for the 1955-1956 essay contest sponsored by the Medical Society is:
"Advantage of Private Medical Care."
 - d. Encouraging, in the interest of preventive medicine and early detection, every doctor and each member of his family, as well as lay persons, to have periodic physical examinations.
 - e. Sponsoring and encouraging the idea of "A family doctor for every doctor's family." Cooperating with other organizations in Health Programs.
9. Enlist every doctor's wife in North Carolina as a member of the Auxiliary.
 - a. Send a personal invitation to each new doctor's wife.
10. Assist our communities in Civil Defense activities.
11. Co-operate with the Southern Medical Auxiliary in its projects.
 - a. Observance of Doctors' Day—March 30.
 - b. Research and Romance of Medicine.
12. Try in every way possible to tie in our projects with the 1955-1956 work theme "Active Leadership in Community Health," of the Woman's Auxiliary to the American Medical Association."

Especially commendable is the Student Loan Fund maintained for sons and daughters of doctors but unused since 1941. The By-Laws have been changed so now three North Carolinians are recipients of this loan. One at Bowman Gray School of Medicine, one at Duke University School of Medicine and one at the University of North Carolina School of Medicine.

The Nurse Recruitment accomplishments have been exceedingly gratifying.

Public Relations has been emphasized. I believe that the best work of the Auxiliary has been done along this line.

The American Medical Education Foundation is praise worthy when you consider \$1,039.80 has been contributed to this project.

The Auxiliary has grown in its strength and varied projects to such an extent it is hard to single out all its various accomplishments. In fact with such a large membership and wide scope of activities it works a tremendous hardship on the President and I still recommend she be given assistance as it is really a full time job. I recommend that as soon as feasible some plan should be worked out either for a full time or certainly a part time Executive Secretary for the Auxiliary.

The Medical Society is indeed proud of the whole-hearted co-operation from the Auxiliary and the valuable help it derives from the accomplishments of the Auxiliary.

Respectfully submitted;
Roscoe D. McMillan, M.D., Chairman
Red Springs
Eleanor B. Easley, M.D., Durham
Milton S. Clark, M.D., Goldsboro
Powell G. Fox, M.D., Raleigh
Jean C. McAlister, M.D., Greensboro
Katherine H. Anderson, M.D.,
Winston-Salem

Committee On Heart Disease Control

The Committee met at the Sir Walter Hotel in Raleigh in November and discussed at length the over-all picture of Heart Disease Control in our state. There were a number of suggestions made by the different members of the Committee and all are in accord that as of today the best educational medium is television and the press with radio playing an important part. The Committee felt that the doctors of the state should encourage television stations to put on programs concerning Cardiovascular Disease and the newspapers to carry articles concerning Cardiovascular Disease. This not only comes under the heading of Professional Education, but also it is good Public Relations.

The profession, as a whole, is aware of the fact that a number of programs have been carried throughout the state this year.

We of the Committee are glad to announce to our Society that the United Medical Research Foundation of North Carolina has now been established and is functioning quite successfully under the guidance of Dr. J. H. Semans of Durham, who is President of the organization, having on his Advisory Committee Vice-Presidents, Dr. James M. Alexander of Charlotte, Judge Norman Gold of Rocky Mount, Reid Holmes of Winston-Salem, and as Secretary, Mrs. T. R. McLean of Fayetteville. The Treasurer is Paul Wright, Jr. of Durham, and Executive Committee members are Eben Alexander, Jr., M.D., of Winston-Salem, John F. McNair, III of Laurinburg, Thomas A. Hood of Fayetteville, John L. Stewart of Charlotte, and M. L. Street of Rocky Mount.

The Research Advisory Committee is composed

of Dr. W. Reece Berryhill, Dean, School of Medicine, University of North Carolina, Chapel Hill—Dr. C. C. Carpenter, Dean, Bowman Gray School of Medicine, Winston-Salem—Dr. W. C. Davison, Dean, Duke University Medical School, Durham.

There have been a number of symposia throughout the state during the year on Cardiovascular Disease and the meetings have been well attended. On two occasions during the past year, Dr. Paul D. White of Boston, has appeared on programs in our state.

Respectfully submitted,
Elias S. Faison, M.D., Chairman
Robert L. McMillan, M.D.
Frank B. Marsh, M.D.
Howard H. Bradshaw, M.D.
Glenn E. Best, M.D.
Ernest Craige, M.D.
Charles M. Kendrick, M.D.
William A. Anthony, M.D.

Committee On Necrology

The Committee on Necrology, through its chairman, has held several conferences with the executive secretary and has been in active communication with him otherwise in developing a complete list of the deceased physicians in the state during the period April 1, 1955, to March 31, 1956. All sources of newspaper clippings, state vital statistics reports, county society membership reports and general verified information has been resorted to. Finally, the Chairman of the Necrology Committee and headquarters office has made a concentrated and last minute effort to secure all possible information on deaths of physicians occurring in the state.

In cooperation with the President of the State Society, Dr. James P. Rousseau, and with the headquarters office, a program of recognition, devotion, inspiration and music has been prepared for presentation at Pinehurst, Sunday evening, April 29, 1956, and will be staged both in memory of the deceased physicians as well as the deceased wives represented in the auxiliary.

Charles H. Pugh, M.D., Chairman
Gastonia
Ben F. Royal, M.D., Morehead City
J. Buren Sidbury, M.D., Wilmington

ANNUAL REPORT OF THE BOARD OF MEDICAL EXAMINERS OF THE STATE OF NORTH CAROLINA

May, 1955 - May, 1956

The State Board of Medical Examiners presents to you, the State Medical Society, the annual report on its activities.

The Board has held its regular five meetings for the purpose of licensure and the transaction of other business; also a special call meeting on January 20th, 1956. It has diligently and conscientiously attempted to administer the Medical Practice Act to the best interest of the citizens of the State and to administer justice in a constructive and sympathetic manner.

Corporate Practice of Medicine—A letter was sent to the Attorney General of North Carolina in December, 1954, asking for an opinion on some proposed facts in regard to the corporate practice of medicine. In the meantime a new attorney general had been appointed before a letter was received from his office on December 9th, 1955. The Board of Medical Examiners reviewed this letter in its meeting in Durham on January 14th, 1956, with the officers of the State Medical Society. The report was turned over to them for their consideration and recommendations as to the next step the

State Society desired the Board of Medical Examiners to take.

Annual Registration of Physicians—After careful study, the Board presented to the Executive Council that they consider a change in the Medical Practice Act so there would be annual registration of physicians in North Carolina.

Recommendation in Regard to Election to the State Board of Medical Examiners—The Board recommended to the State Medical Society that in view of the large volume of work and the problems facing the medical profession at the present time, that the Executive Council consider the question of changing the election of the board members so that its personnel would not change entirely at any one time.

Narcotic Law—Due to the increased activities of the State Bureau of Investigation and more strict enforcement of the law, it has brought to the attention of many physicians that they were violating the law because of the routine practice they had fallen into in phoning in and neglecting to sign prescriptions. Investigations by the State Bureau of Investigation showed that this habit had been used to marked advantage by violators of the law. It seemed that each investigation uncovered information of other violations which were followed up. In some instances the names of innocent persons appeared in the reports.

Narcotic Addiction—By the same token, the many investigations made by the State Bureau of Investigation has revealed cases of narcotic addiction, which in some instances led to indictment and conviction in the superior courts, and hearings and conviction by the Board of Medical Examiners.

The Board has continued its policy of surveillance of narcotic addiction previously interviewed or heard by the Board.

The members of your Board are as follows:

Dr. Newsom P. Battle, Rocky Mount—Examiner in Surgery

Dr. Joseph J. Combs, Raleigh—Medicine and Therapeutics

Dr. L. Randolph Doffermyre, Dunn—Physiology and Chemistry

Dr. Clyde R. Hedrick, Lenoir—Pathology and Bacteriology

Dr. Amos N. Johnson, Garland—Pharmacology, Pediatrics and Hygiene

Dr. Gibbons Westbrook Murphy, Asheville—Anatomy, Embryology and Histology

Dr. Heyward C. Thompson, Shelby—Obstetrics and Gynecology

The following is a summary of the work for the past 12 months:

Total number applicants granted license.....	337
By written examination	206
By endorsement of credentials	131
Limited license	65
Hospital residents	56
Limited to county or counties	5
Borderline practice	4
Limited license converted to full license	7
Special limited license	71
Hospital residents	39
Postgraduate foreign exchange students..	17
Staff state institutions	15
Written examination failure	3
Applicants rejected licensure by endorsement....	1
Narcotic addiction	
Applicants declined permission to take written examination	0
Hearings	18
Narcotic addiction	5
Physicians convicted in Superior Court violation narcotic law	4

Physician convicted Federal court violation Harrison narcotic law	1
Physicians violating state narcotic law	8
Investigation by State Bureau of Investigation	21
Violation narcotic law	13
Physicians addicted narcotics	7
Layman alleged to be practicing medicine	1
License revoked	0
License voluntarily surrendered	1
Conviction Federal Court narcotic addiction	1
License suspended	1
Conviction Superior Court violation narcotic law	1
Prayer for Judgment Continued	2
Narcotic addiction and violation state narcotic law	1
Violation state narcotic law	1
License reinstated	1
Board recommended voluntary surrender narcotic tax stamp	6
Violation narcotic law	3
Narcotic addiction	3
Board recommended reinstatement narcotic tax stamp	3

Respectfully submitted,

BOARD OF MEDICAL EXAMINERS
OF THE STATE OF NORTH
CAROLINA

L. R. Doffermyre, M.D., President

Joseph J. Combs, M.D.,
Secretary-Treasurer

Committee On Publications

As Chairman of the Committee on Publications, I have to report the annual meeting of the Editorial Board of the N. C. MEDICAL JOURNAL, Tuesday, May 3, 1955, Pinehurst, North Carolina when discussion was had on the editorial and managerial progress of the Journal. A quorum of members were present. It was the consensus of view that there be some fundamental changes in the format but no change in the editorial policy. There was general urging that those facilities responsible for the Journal production be urged to bring the publication out on the scheduled publication date of the fifteenth of the month. The general advertising and expense of the publication though on the increase respectively, appeared to be in proper balance as for previous years. The business manager was authorized to effect a minimum of 15% increase in the published advertising rate as of January 1, 1956. The business manager, Mr. James T. Barnes, has so established the new rate.

M. D. Hill, M.D., Chairman, Raleigh
John Borden Graham, M.D.,
Chapel Hill
Wingate M. Johnson, M.D.,
Winston-Salem
G. Westbrook Murphy, M.D.,
Asheville
William McN. Nicholson, M.D.,
Durham

Committee To Arrange Facilities For Annual Sessions

In compliance with actions of the House of Delegates final plans have been concluded to hold the 1956 Annual Sessions at Pinehurst, April 29-May 2, 1956.

The finest program ever devised for the society has been organized and is in readiness to be portrayed through the four days scheduled April 29-May 2. The program consists of essays, panels, audio-visual projections, and still displays of

scientific and technical substances. Proper business schedules have been prepared.

Moreover, the entertainment features are anticipated to be the greatest and most satisfying in a long train of successful Annual Sessions.

No effort has been spared by the officers and the staff in planning a memorable annual program of worth and pleasure for all of the membership.

M. D. Hill, M.D., Chairman, Raleigh
J. C. Grier, Jr., M.D., Pinehurst
M. W. Marr, M.D., Pinehurst

Liaison Committee, State Service Organization On Veterans

Your representative has continued to meet each quarter with representatives of other agencies interested in veterans' affairs forming the committee. At the last meeting the first Wednesday in February due to unforeseen circumstances, your committee chairman was unable to meet with the committee. Mr. Barnes was able to go since I called him the day before, but we were unable to have any other physician attend.

Due to various factors, some of which have been operating within the committee from its very start, there have been individuals who have not wanted the committee to function. Apparently without warning, a move was made for dissolution of the committee which we feel has formed a useful function through the years with the American Legion, the Veterans Administration and others.

This resolution was passed but subsequently when Mr. Leroy Shuping, the chairman of the committee, returned, he pointed out that this committee was formed originally as a liaison between the American Legion and the Medical Association. It was further pointed out that if other groups wanted to come to the meeting, they were cordially invited as they had been in the beginning but that they had no authority to dissolve the committee. It was therefore felt by him and by your representative from the Medical Society that the meetings would be held as usual. Various matters have come up for consideration, most of which have been submitted to Dr. Samuel Elfmon of the Veterans Affairs Committee and these will be submitted to the Executive Council through him.

Eben Alexander, Jr., M.D., Chairman
Winston-Salem
James T. Barnes, (Consultant)
Raleigh

Anesthesia Study Commission

Following the practice established in 1953, the Anesthesia Study Commission has been notified by the North Carolina State Board of Health of all deaths occurring during or within three days of operation and has investigated by questionnaire those cases in which it seemed possible that anesthesia might contribute to death.

Of the 485 deaths reported by the State Board of Health, 157 were investigated by questionnaire. In the remaining 328 cases the nature of death seemed unrelated to anesthesia. Of this total of 485 cases, it seemed quite clear that anesthesia was directly and totally responsible for death in 24 instances. In another 49 cases, death occurred during or immediately following operation, and evaluation of the relative roles of surgery, the patient's disease, and anesthesia was difficult. In another 84 instances death seemed due to progression of the patient's disease or postoperative complications not associated with anesthesia.

The results gathered in 1955 are hardly different from those reported previously (N. C. Medical Journal 16:351-352 August 1955). Deaths do not

seem related to age, severity of disease, operation, anesthetic agent, or technic. The weakest link in the chain of anesthesia and surgery seems to be that of the person administering the anesthetic agent or responsible for the patient's care during and immediately after surgery. It is interesting to note that the Committee on Maternal Welfare has expressed concern over anesthetic deaths in obstetrical patients. Following the example of the Committee on Maternal Welfare, this Commission feels that it now has enough material collected to present to the physicians of North Carolina illustrative case reports and recommendations. Perhaps these reports, presented in the North Carolina Medical Journal, may do more to prevent future accidents and fatalities than any incriminating statistics presented at this time. It is hoped that interested physicians will bring these articles to the attention of nurse anesthetists and others working with them. Again it is not the purpose of this Commission to aim adverse criticism at anyone or any group, but to try to save lives.

David A. Davis, M.D., Chairman,
Chapel Hill
Charles R. Stephen, M.D., Durham
Roscoe L. Wall, Sr., M.D.,
Winston-Salem
Howard H. Bradshaw, M.D.,
Winston-Salem
J. Deryl Hart, M.D., Durham
Nathan A. Womack, M.D.,
Chapel Hill
Joseph S. Hiatt, Jr., M.D.,
Southern Pines
John C. Reece, M.D., Morganton
Donald H. Vollmer, M.D., Asheville
Walter T. Tice, M.D., High Point
C. Hampton Mauzy, Jr., M.D.,
Winston-Salem

Committee On Audio-Visual Postgraduate Instruction

Based on conclusions reached more than a year ago, it was not possible for the Society to extend beyond the Annual Sessions while still meeting in Pinehurst. Therefore, the Committee on Audio-Visual Postgraduate Instruction secured the authority of the Council to lend emphasis to its program schedule, which from the outset has been staged on Sunday preceding the Annual Session and continued on Monday . . . the first day of the previous Annual Sessions. Thus, for 1956, the Annual Sessions becomes effective Sunday, April 29, and continues through May 2 . . . four days of concerted scientific effort in the presentation of educational material for the physician in practice. All of these presentations meet the criterion of postgraduate work of the Academy of General Practice as hours of instruction. At least some of the Sectional programs will be designed along the particular line of postgraduate instruction. Conditions of Annual Sessions assembly in 1957 may possibly offer opportunities for further extending this type of programming and the Society's determined place of meeting for 1957 should be explored immediately when the new committees are designated after May 2nd.

Finally, it has been established by the Council that general registration should be established and opened sufficiently early on Sunday, April 29, 1956, to permit those physicians attending programs on Sunday and Monday to register and cite such registration in the accreditation of the instructional work in which they participate.

Lenox D. Baker, M.D., Chairman,
Durham

Amos N. Johnson, M.D., Garland
 Everett I. Bugg, Jr., M.D., Durham
 Louten R. Hedgpeth, M.D., Lumberton
 Jerome O. Williams, M.D., Concord
 William P. Richardson, M.D.,
 Chapel Hill
 W. Walton Kitchin, M.D., Clinton
 J. Leonard Goldner, M.D., Durham
 Ernest H. Wood, M.D., Chapel Hill

Committee Liaison To Study Integration Of Negro Physicians Into Medical Society Of The State Of North Carolina

A meeting of the Committee to Integrate Negro Physicians into the Medical Society of the State of North Carolina, was held in Kinston on Sunday, February 26th, 1956. The Committee, consisting of Dr. J. Street Brewer, Dr. Ben Royal and Dr. Paul F. Whitaker, were all present. Dr. Brewer, as Chairman of the Committee, presided.

The Committee reviewed in general the action taken by the House of Delegates at its May 1955 meeting in Pinehurst to admit qualified Negro physicians to the scientific and business sessions of the Society. Dr. Brewer reported on the efforts being made to find a place of meeting for the Society in the future. It was the feeling of the Committee that Asheville could perhaps offer the best overall accommodations in the immediate future. Of course, this Committee will be guided by and abide by the decision of the committee dealing with this specific matter.

As far as the Committee knows, no Negroes have yet applied for membership in the various county societies of the state.

The Committee recommends that the dues for any Negro physician that may apply be set at \$20.00 per year—\$15.00 of which would be for public relations and \$5.00 for operation of the State Office of the Medical Society of the State of North Carolina. This was agreed upon unanimously by the Committee.

The Committee also recommends that the various composite county societies of the Medical Society of the State of North Carolina fix their own dues for Negro physicians who might apply for membership in the light of careful consideration of local conditions pertaining. They feel that this is a county responsibility and also recommend that record of applications for membership by Negro physicians be immediately forwarded to the central office of the Society.

As the members of the Society well know, the officers and council of the Medical Society of the State of North Carolina, by reason of the difficulty of finding a meeting place which would accommodate Negro physicians as business and scientific members, requested that the various county societies admit no Negro physicians to membership until after the 1956 meeting in Pinehurst. In the light of this action, the Committee and the Society have of course had no experience in the admission of Negro physicians, and the results of the action taken by the House of Delegates in admitting them to scientific and business membership, cannot yet be determined. Until such experience and results can be ascertained and evaluated, it was the unanimous opinion of the Committee, after careful consideration of the resolution presented by Dr. Ben J. Lawrence to the House of Delegates, and passed by the House of Delegates at its final session of the 1955 meeting, that on the basis of the facts in hand at the present time, that it would not be in the best interests of the Medical Society of the State of North Caro-

lina to undertake the organization of an additional group within the Society or associated with the Society as that resolution proposes to do.

J. Street Brewer, M.D., Chairman,
 Roseboro
 Paul F. Whitaker, M.D., Kinston
 Ben F. Royal, M.D., Morehead City

Committee To Study And Determine A Recommendation On Annual Meeting Place For Future Years

This is an official report relative to my Committee on an Annual Meeting Place.

The meeting was held at my home on August 27th. Those present were: Doctor Sidney F. LeBauer, Dr. William H. Sprunt, Dr. George T. Alexander, Dr. Edward W. Schoenheit, Dr. J. Street Brewer, Dr. Donald B. Koonce and myself.

Each member of the Committee had been asked to investigate his particular locality relative to a possible meeting place.

Dr. Sanford W. Thompson, Jr. of Morehead City, was not able to be present but he reported that Morehead City could not handle the meeting.

Dr. London was also absent but he had the Durham Chamber of Commerce forward me pertinent data.

After a thorough discussion of the data submitted, it was obvious that there was only one City with facilities comparable to those at Pinehurst. In other words, this means enough space for our scientific exhibits, enough hotel space in the immediate area to accommodate the members and their families and a large enough hall where an appropriate meal can be served.

In Asheville, we have two hotels within a block of each other, viz., the Battery Park and the George Vanderbilt. What is most important is that next door to the George Vanderbilt is a fine auditorium which would house not only exhibits but in which a satisfactory banquet could be served directly from the George Vanderbilt. This has been done for other conventions. For those who preferred to stay outside of Asheville, the Grove Park Inn would be an ideal place. There is also a new Howard Johnson Motor Court which will accommodate one hundred guests. Asheville has the disadvantage of being in the far Western part of the State but, unquestionably, excels in facilities. It also has the advantage of being in a resort area and the meeting would be held at a very beautiful time of year.

Raleigh is also a possibility. The State College Coliseum could be used. The facilities, however, would not be in the same concentrated area as in Asheville, although it has the advantage of being centrally located in the State.

Both Charlotte and Durham, likewise, have the disadvantage of having no dining room large enough that could be directly serviced by one of the downtown hotels to accommodate a banquet the size of the North Carolina State Medical Society. Moreover, in all these considerations, it must be borne in mind that we have to have suitable and sufficient extra meeting rooms for the sectional and committee meetings. There is also the question of the alumni luncheons.

After full consideration and discussion, the Committee voted to make the following recommendations: 1. That we go back to Pinehurst, if it is in any way possible. 2. That, if not, Asheville seems to be the place of choice. 3. Raleigh was the next choice of the Committee. 4. Charlotte was the fourth choice of the Committee.

No other recommendations were made, since the only function of this Committee was to recommend

alternate meeting places after thorough study.

V. K. Hart, M.D., Chairman,
Charlotte
Donald B. Koonce, M.D., Wilmington
Arthur H. London, Jr., M.D.,
Durham
J. Street Brewer, M.D., Roseboro
Edward W. Schoenheit, M.D.,
Asheville
Sidney F. LeBauer, M.D., Greensboro
Wm. H. Sprunt, Jr., M.D.,
Winston-Salem
George T. Alexander, M.D.,
Thomasville
Sanford W. Thompson, Jr., M.D.,
Morehead City

Committee To Coordinate Section Programs As To Theme And Arrangement And To Serve As Liaison On Problems In Projecting Annual Session Programs

This committee was appointed for the first time in 1955 and has had no meeting during the year. Its scope is not clearly understood. However, certain thoughts arise which may be of some value. It seems that it would be of value to have a meeting of all section chairmen, together with the chairman of the scientific exhibits and chairman of the audio-visual postgraduate instruction program, soon after they are selected each year in order to plan a more co-ordinated program, particularly that of the general sessions. In this way, these sessions may be made more valuable to those attending and might even attract larger attendances.

In addition it would seem that some consideration might be given to yearly selection of some eminent medical authority for the general session and whose expenses would be borne by the Society and not the section which he represents.

Furthermore, this committee might be of more help to the section chairman in outlining his duties, the arrangement of the programs, and the business to be transacted by the sections.

James F. Marshall, M.D., Chairman,
Winston-Salem
Raymond W. Postlethwait, M.D.,
Kinston
Wm. P. Kavanagh, M.D., Coolemeec
Wm. F. Hollister, M.D., Pinehurst
Roger W. Morrison, M.D., Asheville
Alan Davidson, M.D., New Bern
Ernest H. Wood, M.D., Chapel Hill

General Chairman American Medical Education Fund

In 1954 county committees were appointed to conduct county-wide solicitation of funds for the American Medical Education Foundation. It was too late in the year before the county committees were reported to be able to conduct any campaign and it was requested and the request was granted that the committees be continued for the year 1955.

In August and September, 1955 kits of information sent out by the A.M.E.F. headquarters together with individual pledge cards were forwarded to the various county chairmen of the societies that were organized. In addition the same material together with a personal letter were sent to district chairmen for each of the ten councilor districts. The financial response was considerably better in 1955 than in any previous year. The overall results, however, are still far below the amount needed. In view of the fact that the A.M.E.F. contributed over \$60,000.00 to our three

medical schools and as a result of our campaign North Carolina doctors contributed only nearly \$6,000.00 to the A.M.E.F.

The Sampson County and Surry-Yadkin County Societies each recommended that our membership dues be increased and that the amount of increase in dues be paid directly to the A.M.E.F. This fact was reported to the Executive Committee at its February meeting and a committee was appointed to study the matter of increasing the membership dues.

Harry L. Johnson, M.D., Chairman,
Elkin

Committee To Study Section On Internal Medicine

The Committee appointed by President J. P. Rousseau, M.D. to study "Section on Internal Medicine" met on February 29. The entire committee feels that the name of the Section on Practice of Medicine should be changed to Section on Internal Medicine. We believe that this will meet the approval of the N. C. Society of Internal Medicine and other internists of the state. We would urge that the necessary legislative steps be taken to make this change a reality.

A copy of factual information which the committee used in arriving at the above conclusion has been filed with Headquarters Office.

James M. Alexander, M.D., Chairman,
Charlotte
Edward W. Schoenheit, M.D.,
Asheville
Edgar T. Beddingfield, Jr., M.D.,
Stantonsburg
Thomas L. Umphlet, M.D., Raleigh
George W. James, M.D.,
Winston-Salem

Advisory Committee To The N. C. State Board Of Public Welfare

The Advisory Committee of the State Medical Society to the State Board of Public Welfare met on October 2, 1955, and again on March 4, 1956, in Raleigh. Members of the Committee in addition to the Chairman are Dr. Allyn B. Choate, Dr. A. H. Elliot, Dr. Frederick C. Hubbard, Dr. Charles H. Gay, Dr. Jack C. Horner, Dr. William W. Noel, Dr. William R. Stanford, Dr. Frank P. Ward, and Mr. James T. Barnes.

The Committee has been particularly interested in the new fund for hospitalization of public assistance recipients since the State Medical Society supported the legislation in the 1955 General Assembly which made this fund possible. The plan is working smoothly and to the advantage of both patients and hospitals. The Advisory Committee has given not only full support to the plan as now operating but recommends that the State Medical Society support an increase in the State appropriation to \$500,000 for each year of the next biennium in order that the full benefits of the plan may be realized.

In connection with this and other hospitalization matters, the Advisory Committee has given considerable attention to the reasons for the wide variation in average length of stay of indigent patients in hospitals. Among the reasons involved are differences in hospital administration, the unsuitable home conditions of some of the recipients of financial assistance, and the fact that with this type of medical risk the period of care is unnecessarily extended on occasion by physicians. The Advisory Committee has recommended that county departments of public welfare certify hospitalization for the number of days of care recommended by the physician and that there be careful check

with regard to discharge at the end of the recommended period. The members of the Advisory Committee consider it advisable for each county department of public welfare to have a staff member who works with the individual hospital around planning for their patients to leave the hospital as promptly as they can do so with medical indication and safety.

In connection with plans for hospitalization, the Committee has given considerable attention to the part-pay patient. It is cooperating in further planning around the possibility of developing a more effective plan for the person who can pay part of his bill but will have to be certified as indigent at some point in connection with his hospitalization.

The Advisory Committee is pleased that Dr. W. Nelson Thompson, a member of this Society, is now giving half-time service to the State Board of Public Welfare. Dr. Thompson is thus daily available for consultation on any aspect of the public welfare program which involves medical questions. He is responsible for review of the medical aspects of the program for aid to the permanently and totally disabled. He is further responsible for the determination of disability under the program for disability freeze determinations under old-age and survivors insurance. While Dr. Thompson carries the responsibility for making the determination of disability, he must from time to time correspond with physicians throughout the State in order to obtain the necessary clinical information as a basis for making these determinations. Your Advisory Committee has reviewed in detail the plan under which disability freeze determinations are made in this State and feels that it is working soundly and satisfactorily and there are indications that only 60 per cent of all applicants are found to meet the criteria for certification of disability. In order that all physicians may have more understanding of this program, a letter from the Commissioner of Public Welfare to members of the State Medical Society was authorized to be sent out with the May Public Relations Bulletin of the Society.

The Advisory Committee has noted with approval the agreement between the State Board of Public Welfare and the State Board of Health and other State agencies with respect to the basis for certification for various specialized health programs, supported through State and/or Federal funds.

During the past year the Advisory Committee has continued its direct interest in the adoption program of this State. Your Committee has been alert to any situations in which a physician through ignorance has violated the North Carolina law or procedures with regard to adoptive placements. It arranged for copies of the pamphlet on "The Adoption Program in North Carolina" prepared by the State Board of Public Welfare to be mailed to all members of this Society. Further, it has developed a recommendation with regard to the role of the physician in adoption for consideration by the Society.

One of the recent problems brought to the attention of the Advisory Committee by the State Board of Public Welfare was the hazard in group care of infants. This Committee has taken the position that it is not sound medically to have a number of infants under group care outside the controlled environment offered by a hospital. However, this Committee felt it important to clear the matter with the special committee of the Society on pediatrics, of which Dr. Angus McBryde of

Durham is chairman. We have been informed by the Committee on Pediatrics that it supports the position of this Committee that group care of infants cannot be approved.

The Advisory Committee has been kept informed with regard to the developments in the program of the State Board of Public Welfare for the licensing of homes for the aged and infirm and has noted with approval the increasing number of such homes approved to the present total of 280. Even this number falls far short of the needs throughout the State for domiciliary care, often accompanied by a considerable degree of personal care, for the aged and infirm. Your Committee has recognized the clear differences between domiciliary care, with or without personal care, and medically supervised nursing and convalescent care in facilities to be licensed by the Medical Care Commission.

The Advisory Committee has noted with approval the increasing use of psychiatric consultation by the State Board of Public Welfare in appropriate situations with two part-time consultants now employed by the State Board. The types of consultation provided fall within what is commonly designated as in-service training programs. This development will help case workers in the county departments of public welfare to recognize mental symptoms of clients earlier, with the hope that this will lead to more prompt treatment.

Another aspect of the program of the State Board of Public Welfare of particular interest to the Advisory Committee is the availability of psychological examinations through a staff of five well-qualified psychologists. The use of this service is carefully supervised and related to the ongoing programs of welfare services with necessary consultation from one of the psychiatrists mentioned above. Almost 3,000 cases are seen by the psychologists in a given year. The medical profession may find it helpful in some instances to refer patients through the appropriate county department of public welfare for this excellent evaluating service of the team.

A survey by the State Board of Public Welfare of county appropriations for medical care and hospitalization has proved helpful in giving more information with regard to the growing recognition of their responsibilities in this area by the 100 boards of county commissioners. The data collected will be useful in the development of new, or expansion of existing, programs in this area. The problem around the rising cost of hospitalization is receiving continued attention from your Committee.

Because of the general interest in sterilization and the situations in which eugenical sterilization seems to be called for, your Committee has approved the distribution of a pamphlet explaining the Eugenics Board program to the membership of the State Medical Society and kept in touch with its use. The medical schools are using materials available through the State Eugenics Board.

As your Advisory Committee has increasingly recognized the many areas of mutual interest and concern between the State Medical Society and the State Board of Public Welfare, it has recognized the value of bringing to the attention of all county medical societies the types of information brought to the Advisory Committee. We believe that the channel for consultation offered by the Advisory Committee has been helpful both to the State Board of Public Welfare as it carries out its statutory responsibilities and also to the State Medical Society, with some private service implications, since it provides a channel for recommending policies and procedures with regard to

welfare programs and problems having medical aspects. Your Committee would like to see each county society arrange for a program or programs so that members may become fully informed. We suggest that representatives from the State Board of Public Welfare as well as from the county departments of public welfare be invited to participate in such meetings. Moreover, this Committee and its members will respond to participation requests.

I would like to close this report on a personal note. It was during my term of office as President of this Society that the first Advisory Committee to the State Board of Public Welfare was established after discussion between the Commissioner of Public Welfare and myself. I feel that the value of this Committee has been demonstrated anew at each of its meetings and I urge the continuation of the Advisory Committee for the future.

Respectfully submitted,
J. Street Brewer, M.D., Chairman
Roseboro
W. Raney Stanford, M.D.
Frank P. Ward, M.D.
Charles H. Gay, M.D.
Jack C. Horner, M.D.
William W. Noel, M.D.
Avon H. Elliot, M.D.
Frederick C. Hubbard, M.D.
Allyn B. Choate, M.D.

Legal Liaison Committee To Work With The North Carolina Bar Association

Since this committee was newly formed, a great deal of ground work was necessary before any definitive progress could be made. With the able assistance of the Executive Secretary, a great deal of information was obtained from other states which gave us the benefit of their experience in similar matters. From this material an initial draft of the proposed Interprofessional Code was drawn up and submitted to the members of the legal and medical committees. A meeting was held in Raleigh on Friday night, March 30th, at which the legal and medical groups met separately to prepare any final modifications of the Code. On the following morning the committees met jointly and after considerable discussion agreed on the appended Interprofessional Code to be presented to the respective State Organizations.

The medical committee therefore makes the following recommendations:

- (1) That the proposed Inter-professional Code be adopted by each Society as a guide for medico-legal precedures.
- (2) That the Code be printed in pamphlet form and distributed to all members of the North Carolina State Medical Society and the North Carolina Bar Association.
- (3) It is further recommended that this joint or a similar committee be permanently continued to deal with medico-legal problems if and when they arise in the future.

Interprofessional Code

A. Preamble

Acknowledging that a substantial part of the practice of law and medicine is concerned with the problems of persons who are in need of the combined services of a lawyer and doctor; that the public interest and individual problems in these circumstances are best served only as a result of cooperative efforts of all concerned; that members of both the legal and medical professions

share an obligation to the individual and to society, we, the members of the North Carolina Bar Association and the Medical Society of the State of North Carolina, do adopt and recommend the following declaration of principles as standards of conduct for attorneys and physicians, in inter-related practice.

B. Medical Reports Requested By Attorneys

1. It is recognized that a physician is not required to give medical information concerning a patient except upon proper authority.
2. When requesting such reports, the attorney should clearly specify the information desired, indicating whether or not it is to embody opinions regarding diagnosis, prognosis and disability evaluations.
3. Upon receipt of such request and authority, the physician should recognize its importance in furthering the ends of justice and furnish said report promptly and comprehensively.
4. It is not always possible for the physician to prepare a medical report on short notice, especially if it requires the complete examination of an unfamiliar patient or the perusal of any works of reference. The allowance of adequate time therefore permits the physician to provide a more comprehensive and satisfactory report.

C. Medical Testimony

1. The attorney and physician should confer prior to the physician being called to testify by said attorney in any legal proceedings, unless it is mutually agreed that such conference is unnecessary.
2. Such conference should be held at a time and place mutually convenient to the parties, and at which time the attorney and physician should carefully disclose the matters concerning which the witness is to be interrogated and the testimony that will be given.
3. If an attorney plans to have a subpoena served on a physician he should so notify him promptly, preferably in advance of service where circumstances permit.
4. Under no circumstances, should an attorney seek or attempt to have the physician color or shape his expert testimony in such manner as to favor the interest represented by the attorney.
5. It is recognized that the administration of justice by the courts cannot depend upon the convenience of litigants, attorneys or witnesses, including physicians called to testify. Therefore:
 - (a) The attorney should **notify** the physician as far in advance as possible as to when he is to be needed to testify, and **keep him notified and advised as to any changes** in this respect as they arise.
 - (b) The physician should arrange to appear **promptly** when requested and do so unless prevented by circumstances which would constitute legal excuse.
6. The physician, while testifying should:
 - (a) At all times maintain the dignity of his profession;
 - (b) Answer questions as concisely and objectively as possible, using terminology, when permissible, which is understandable to a jury of laymen.
 - (c) If he does not know the answer to any question, so state and make no attempt to conjecture or theorise, or give answers

not responsive to questions propounded or volunteer testimony;

- (d) Under no circumstances permit any bias, prejudice, favoritism or personal interest to influence his testimony.
- 7. The attorney, in examining or cross-examining a physician, should:
 - (a) Avoid questions which browbeat or badger the physician. Questions of this type are no doubt designed to discredit a witness' testimony by inciting emotional demonstration and are beneath the dignity of the ethical attorney and equally in violation of the dignity of the physician. No judge or presiding officer should tolerate these tactics but when they do arise and are not acted on promptly, the witness may address the court and inquire if he is required to submit to such treatment. Rarely will an administrator or judge fail to restore the hearing to its proper level if such a request is made.
 - (b) Prepare and propound all questions to the witness in such form and manner as will permit clear understanding and a forthright answer.
 - (c) Cooperate with the physician by minimizing, as far as practicable, the time required for the physician to remain in court.

D. Compensation for Services of Physicians In Litigation Matters.

- 1. A physician is entitled to reasonable compensation for professional services rendered. The physician is within his rights in requiring that satisfactory arrangements be made for the payment of reasonable compensation for his services in furnishing any reports, attending conferences, performing examinations or rendering other professional services when requested by an attorney; but this right may be waived by the physician when, in his judgment, the person involved is unable to make payment.
- 2. In cases when an attorney causes a physician to be subpoenaed, or otherwise, to appear in any legal proceedings as an expert witness, the attorney should take such action as may be required by the law or rules of the forum involved, requesting the Court to allow compensation for his services as an expert witness.

E. Interprofessional Courtesy And Tolerance.

It is recognized that both legal and medical professions are essential to society; and their aims are essentially parallel.

This necessitates at all times full understanding and cooperation. Each has the duty to develop an enlightened and tolerant understanding of the other in the best interests of the public, as well as the reputations of the two professions.

Respectfully submitted,
 T. S. Raiford, M.D., Chairman
 R. L. Garrard, M.D.
 John F. Owen, M.D.
 Thomas W. Baker, M.D.
 K. B. Pace, M.D.
 Bennette B. Pool, M.D.

Committee On Medical Society Headquarters Facilities

This committee met and began its deliberations

on July 24, 1955. At that time it was unanimously decided that the facilities in the present offices of the Society are not adequate and that the Society should look toward the purchase of land and the construction thereon of suitable quarters.

At a subsequent meeting the following report to the Executive Council was approved by the committee and presented to the Council on November 22, 1955.

The committee interpreted as its functions the following duties:

- 1. A survey of the present executive offices of the Society;
- 2. Recommendation of any changes that could be effected, leading towards improvement in the provision of more space and greater efficiency.

The committee has met on two occasions and is unanimous in its opinion that the present offices are not adequate and are not in keeping with the dignity of the Society nor were they found sufficient for the safe keeping of valuable records of the Society.

After full discussion and deliberation the committee came to the following unanimous decision:

- 1. That the Society should own and control its executive offices;
- 2. That to this end the Society should purchase land and construct thereon a building to house the executive offices and, in addition, one or more rooms that would be used for committee meetings and also another room or reception hall in which may be displayed photographs of medical leaders and past presidents of the Society and any others of our members who have made outstanding contributions to medicine in North Carolina, and to those who may have had conferred upon them honors at a state or national level. We feel that considerable interest may be stimulated for the placing of plaques or other forms of memorials to members in such a building and that the proceeds therefrom may aid to a substantial degree in financing the building;
- 3. That the first step in such a development will be the procurement of the proper land. In the selection of the land the following points were agreed upon:
 - (A) That the Society should look forward many years—25 to 50 years in the selection of this site. Ours being a permanent organization, over 100 years old, we of today must think in terms of many decades in selecting this location.
 - (B) It should be in the vicinity of Raleigh with favorable access from other sections of the state.
 - (C) That Route 70 between Raleigh and the Raleigh-Durham airport offers the greatest advantages because
 - (a) This is the main east-west highway in the state—now a four-lane road with every indication that it will be permanent,
 - (b) It is on the western side of Raleigh leading from the populous areas of the Piedmont and our three medical schools,
 - (c) Adequate by-passes from eastern North Carolina will be available to those who wish to come to the offices from the eastern part of the state,
 - (d) Easy access to the airport may prove convenient to our members in the future.

(D) That a tract of land should be secured of sufficient size to permit enlargement facilities as are needed. That adequate parking arrangements be provided and, also, room for a keeper's home if this is desired later on. There should be sufficient space to protect the building from being encroached upon by undesirable neighbors of any kind. That an investment in real estate on this road will over the long term prove profitable and that portions of any acreage purchased may, at some later time, be sold at a profit to persons or organizations who would construct facilities that would complement the Society's property. With these points in mind the committee feels that the procurement, if possible, of acreage sufficient to fulfill these requirements for decades to come is necessary.

The committee finds that real estate on the suburbs of Raleigh in the neighborhood of Crabtree Creek will cost from \$2,000 to \$3,000 per acre while land six to eight miles out on Route 70 can be bought for approximately \$500 per acre.

It is also found that very little land is available on this road. The William Umstead State Park occupies a long stretch of frontage just east of the airport and much of the remaining land is in farms operated by their owners and cannot be bought at any price.

It is certain that what land is available is increasing in price each month and options are exceedingly difficult to procure.

The committee respectfully suggests that if the Executive Council agrees with the Committee that new facilities are needed and that the proposed location is desirable with sufficient acreage to make the Society's investment secure, some definite authority be granted the committee or the officers of the Society for the early procurement of the needed land. When the land is secured plans may then be formulated for construction. In the meantime, the committee feels that the Society will have made a splendid long-term investment.

The Executive Council approved the report and authorized the Committee to proceed with its negotiations for land on the Raleigh-Durham Highway (Route 70) and empowered the committee to take options and to purchase property in that area which in its opinion would be suitable for the use of the Society.

The committee proceeded to study various tracts that were brought under its consideration and finally secured options on several of them. At a meeting in mid-January the committee approved the purchase of a piece of land lying approximately eleven miles from Raleigh on the north side of Route 70, beginning a few hundred yards from the entrance to the Raleigh-Durham airport and extending for about one-half mile toward Raleigh. This tract, known as the "Weaver land" comprises approximately fifty-one acres and has 2,700 feet of road frontage. The purchase of the land was reported to the Executive Council and the action of the committee was approved.

The attorneys for the Society examined the title of the said land and the purchase was consummated through them and the Executive Secretary, Mr. Barnes.

The Society now owns in fee simple this tract of land and is free to proceed with plans for con-

struction of a building if and when the Executive Council approves same.

Respectfully submitted,
Wm. M. Coppridge, M.D., Chairman
Malory A. Pittman, M.D.
Frederick C. Hubbard, M.D.
Harry L. Brockmann, M.D.
Hugh A. Thompson, M.D.
Elias S. Faison, M.D.

Committee On Mediation

The committee has held two meetings during the year and anticipates another before the Annual Meeting of the Medical Society at Pinehurst in May 1956. The major complaint of the year has been the controversy of the Richmond County Medical Society. We spent two full days in Rockingham with thorough investigation and made recommendations to the Executive Council.

The other complaints have been of a less serious nature and we feel can wait until May for consideration.

The Committee to Recommend Guides for Mediation Committees appointed by the American Medical Association in December 1954 made its report at the American Medical Association Meeting in Boston, December 1955. I have carefully studied this report and am making two recommendations as adopted by the House of Delegates to the American Medical Association.

First, Committee Title: With a full realization as to both the variety of titles presently used and the reasons underlying the selection of some of these titles, "Grievance Committee" is unquestionably the most realistic title and the one best understood by the profession and the public. The term "grievance committee" has existed for many years through its uniform use by the American Bar Association and State Bar Association.

At present 20 state associations use this title; 2 use Board of Supervisors; and 2 use Mediation Committee. Some others used by individual states are Committee on Grievances, Grievance Board, Committee on Patient-Physician Relations, Committee on Medical Defense and Grievance, Judicial Council, Committee on Ethics and Discipline, Council on Professional Ethics, Committee on Professional Relations, Public Liaison Committee, Judicial and Professional Relations Committee, Judicial and Advisory Committee, and Welfare Committee.

Any unfortunate disguising of a grievance committee's true purpose, by the use of inappropriate titles or by ascribing to it a multiplicity of functions, negates realization of valuable benefits to the profession and the public alike. The grievance committee is of such compelling importance in modern medical organization that a special committee, uniformly designated to disclose unmistakably its true function, should be created and maintained by every constituent association for this purpose and this purpose only.

Second, Operating Procedures: It is desirable that grievances should be heard and adjudicated at the local level. However, examination proves that there are in instances when constituent associations find it necessary to have their state grievance committees investigate and adjudicate complaints originating in component societies that are too small, unwilling, or otherwise unable to undertake this function.

Each constituent association should measure the capacity of its component societies to maintain grievance committees. Such capacity would include consideration of the size of the components, geographical distribution of their members, and the

willingness of these members to undertake this task.

In many states complaints are first received in the office of the constituent association. Some constituent medical associations will find it desirable to refer the great majority of complaints to the component societies with jurisdiction. Where a constituent association refers such cases to a component society or delegates this entire function to a component society, the state grievance committee should become an appeal body for that case or that society.

The necessity for consistency, uniformity, and absolute impartiality has been adhered.

Respectfully submitted,
Roscoe D. McMillan, M.D., Chairman
Zack D. Owens, M.D., Secretary
Frederick C. Hubbard, M.D.
J. Street Brewer, M.D.
Joseph A. Elliott, Sr., M.D.

Committee Of Physicians On Nursing

During the past year the Physicians Committee on Nursing reorganized itself for better functioning. A working set of by-laws has been adopted. This states the purpose of the Committee and the means to carry out this purpose. Sub-Committees are at work on: (1) Improvement of the nursing care of the patient, and (2) Problems concerning nursing service and nursing education. Emphasis has been placed on keeping the members of the Medical Society informed on Nursing and Nursing Education. Also in cooperating with all other groups seeking to promote good nursing.

Following are items which should interest delegates and members of the Society:

1. **Nursing Education:** The Committee wishes to emphasize to the whole Society the fact that the quality of nursing care and an adequate supply of good nurses depends to a significant degree upon a sufficient number of qualified nurse teachers. Experience during the past year has revealed a lack of understanding on the part of those in whose hands it is to provide funds to establish facilities and personnel to train nurses to become qualified teachers of nursing and nurse administrators. Although much of the teaching continues to be done by doctors the bulk of the teaching must be done by nurses in the field of nursing education. These nurse teachers should have in general the same consideration given men and women entering the field of general education. The nurse-teacher must be both a good nurse and a good teacher. Also involved in meeting this need is the job of getting good nurses interested in becoming teachers. This is difficult. We must establish a definite program of graduate training for nurse-teachers in one or more of the degree schools of nursing in the state, and provide a number of free scholarships without too many commitments being required.
2. **Legislation:** Of note is a proposed **National Commission on Nursing Services:** In the National Congress, House Joint Resolution 171 to establish a Commission on Nursing Services was recently introduced by Rep. Frances P. Bolton (R-Ohio). This proposes to set up a federal study commission on nursing service which would gather data on nursing. It would seek to clarify the provinces of professional and practical nurses, to improve and extend nursing education and training resources, and to encourage more effective organization and utilization of this personnel.

The American Nurses' Association vigorously opposes this commission, stressing its desire to act as an equal with other recognized professions in a free and democratic society, and objecting to the nurse profession being subjected to "a so-called multi-disciplinary study under government auspices."

The American Hospital Association also is opposed to this bill. In spite of opposition on the part of organized nursing and A.N.A., very many individual nurses, hospitals administrators, laymen, and the AMA approve the Bolton plan. More recently Mrs. Bolton, the Congresswoman from Ohio, has introduced a second bill (H.J.Res. 485) "to gather by scientific methods authoritative data relating to problems of the patient and the public in securing adequate nursing services, and to make recommendations to the President with respect to ways and means of solving such problems."

As the publication R. N. states "This may be the most progressive or most detrimental nursing legislation yet proposed." Hence, we should all follow it closely and act wisely.

3. **The North Carolina Committee for Nursing and Nursing Education** has continued actively during the past to influence progress in the realm of nursing. Working through a sub-committee on Nursing Care of the Patient an effort is being made to set up as a pilot program in three of the state hospitals Local Hospital Joint Committees for the Improvement of the Care of the Patient. It is believed that if these local joint committees are given a fair trial there will be significant improvement in patient care and hospital functioning in general. Heads of nursing service and of nursing education, hospital administrators and medical staff in various parts of the country where such committees are active are realizing their great help in smoothing out problems of patient care.

Respectfully submitted,
Harry L. Brockmann, M.D., Chairman
Moir S. Martin, M.D.
Vernon H. Yonblood, M.D.
Robert W. King, M.D.
William G. Spencer, M.D.
David T. Smith, M.D.
W. Reece Berryhill, M.D.
W. D. James, M.D.

Committee To Study Medical Education And Medical Care At The House Officer Level

This Committee was appointed by President James P. Rousseau in June 1955, with the following objectives:

1. To determine the need of house officers in our accredited hospitals.
2. To formulate and recommend the highest standard of teaching programs for house officers.
3. To assist in better distribution of house officers in North Carolina hospitals.
4. To discuss with and persuade some lay hospital boards of the need for competent adequate house officer staffs in order to carry on better educational programs for house officers and to promote a high standard of medical care for hospital patients.

The first meeting of the Committee was held in Raleigh on December 4, 1955, with an unusually good attendance, there being eleven representatives

from hospitals over the State. Every member, including three deans of our medical schools, entered into the discussion with enthusiasm. It was particularly gratifying to have such fine cooperation from Doctors Wilbert Davison, C. C. Carpenter and Reece Berryhill.

After a frank discussion with these representatives of our medical schools concerning placement of house officers, their position in the matter was made plain. Since all medical graduates have freedom of choice all members of the Committee readily appreciate the position of the deans.

The objectives outlined by President Rousseau were discussed in detail and many suggestions made with the hope that this serious lack of interns and residents in accredited non-teaching hospitals might be relieved. However, it was realized that this is a major project which cannot be accomplished without full cooperation of the medical staffs and governing boards of these hospitals.

Since there are about 8,000 postgraduate appointments in the United States each year with approximately 7,000 graduates in medicine to fill these appointments, it becomes apparent that these non-teaching hospitals must develop a superior type of intern and resident teaching program if they hope to secure an adequate number of house officers.

On motion of Dr. C. C. Carpenter, seconded by Dr. Joseph Van Hoy, it was voted to invite representatives of North Carolina hospitals of 200 beds or more to attend a meeting in the near future for the purpose of further exploring the situation.

Therefore, the following representatives of these hospitals were invited to meet with the Committee on January 22, 1956: (1) chairman of the internship committee; (2) chairman of the professional staffs and (3) chairman, or designated member, of the Board of Trustees of the hospitals in question. The attendance of this meeting totaled 36.

At this meeting the problem was freely discussed by Hospital Administrators, members of Boards of Trustees as well as representatives of Medical Staffs. Without exception all discussants demonstrated a real interest in establishing an acceptable training program for house officers in their respective hospitals.

At the conclusion of the meeting Dr. C. C. Carpenter was appointed chairman of a subcommittee to contact all hospitals in North Carolina of 100 beds or more to determine whether the Staffs and Boards of Trustees are interested and willing to participate in such a program.

Following this survey of hospitals by the subcommittee another meeting is planned prior to the Annual Meeting of the North Carolina Medical Society at Pinehurst.

Respectfully submitted,
Russell O. Lyday, M.D., Chairman
Wilbert C. Davison, M.D.
Coy C. Carpenter, M.D.
W. Reece Berryhill, M.D.
Graham B. Barefoot, M.D.
Millard D. Hill, M.D.
George W. Holmes, M.D.
Thomas T. Jones, M.D.
Paul W. Sanger, M.D.
Joshua F. B. Camblos, M.D.
Hugh A. McAllister, M.D.
Isaac H. Manning, Jr., M.D.
Mr. J. P. Richardson (Consultant)

Committee On Legislation

Since the North Carolina Legislature has not been in session during the current year of this

Committee we have been concerned almost exclusively with legislation on the national scale. The most important of which is HR-7225 which has to do with granting Social Security benefits to disabled persons age fifty and over. The Chairman of the Committee, at the request of the President of our Society, attended with him, the Secretary, the Executive Secretary and a member of the Public Relations Committee, a meeting held in Chicago, August 22, 1955, under the auspices of the American Medical Association to study this proposed HR-7225 disability legislation. Following that, as you well know, a state-wide meeting of presidents, secretaries, delegates and other interested physicians was held November 20 in Raleigh, North Carolina, to discuss this important matter. We believe this was a very enthusiastic and successful meeting and we believe that the doctors in North Carolina have gone all out in opposition to this proposed legislation.

On February 22, 1956, your Chairman went with Dr. James P. Rousseau, President; Dr. Millard D. Hill, Secretary; Mr. James T. Barnes, Executive Secretary and Public Relations Committee member John S. Rhodes, M.D., to Washington, D. C., where President Rousseau appeared as a witness before the Senate Finance Committee in opposition to HR-7225. President Rousseau made a splendid, and we believe, convincing argument in opposition to the disability provision of the bill. At the writing of this report, March 20, 1956, the Senate Finance Committee has not yet reported on the bill.

Our President, the Executive Secretary's Office and certain officials of the Hospital Saving Association and the Chairman of your Committee on Legislation have been concerned with the aid to veterans dependents bill which is before Congress. We opposed certain provisions of the bill and offered suggestions that we believe will improve it. The bill has not yet been passed by both Houses and Congress but it seems certain that some form of aid to veterans dependents will be passed at the present session of Congress.

Your Committee has registered opposition to HR-483, a bill to commission osteopaths into the Medical Corps of the armed services. Your executive officers have registered opposition and we understand many doctors of the State have done likewise.

There has been no formal meeting of the Legislative Committee during the past year because your Chairman did not feel justified in asking so much travel of the members when it was felt that most of the business could be handled by and through the executive offices.

The members of the Committee on Legislation are:

Millard D. Hill, M.D.
John C. Young, M.D.
Fleetus L. Gobble, Jr., M.D.
Earl W. Brian, M.D.
Hugh A. McAllister, M.D.
Palmer A. Shelburne, M.D.
Charles M. Norfleet, Jr., M.D.
Joseph A. Elliott, M.D.
Arthur H. London, Jr., M.D.
Benjamin W. McKeuzie, M.D.
Joseph J. Combs, M.D.
Dewey H. Bridger, M.D.
J. Street Brewer, M.D., Chairman

Respectfully submitted,
J. Street Brewer, M.D., Chairman

Advisory Committee To The North Carolina Medical Care Commission

The report of the North Carolina Medical Care Commission shows that since March 15, 1955, 33 additional projects, including 16 Hospitals, 13 Health Centers, 1 State-owned facility, 1 Diagnostic and Treatment Center, 1 Rehabilitation Hospital, and 1 Chronic Disease Hospital unit providing a total of 558 new patient beds, have been approved by the Commission. This brings the total number of projects approved by the Commission during the nine year period, July 1, 1947 to June 30, 1956 to 226. 179 of these projects have been completed, 25 are under construction, and 22 are in the planning stages.

The total cost of the 226 approved projects is estimated at \$87,290,592. \$31,738,299 was provided by Hill-Burton funds, \$16,064,855 by State funds, and \$39,487,438 by the local communities.

The report also shows that for the current fiscal year the Commission received \$3,949,179 Federal funds, but no State funds for hospital construction. It will be necessary, therefore, when the balance of State funds is exhausted, for the local sponsors to bear the entire cost of projects less the amount of Federal funds supplied for same. Federal aid at the present is on a 50% basis.

The original Hill-Burton Act was amended in 1954 to include Nursing Homes, Diagnostic and Treatment Centers, and Rehabilitation facilities. During the fiscal year 1955-56 the Commission received \$707,120 from the Federal government toward the construction of these facilities. The Commission has approved 3 projects in this category in addition to the 226 projects already mentioned.

The Commission paid during the calendar year 1955 \$315,663 to 129 North Carolina hospitals toward the cost of hospitalization for medically indigent patients. The number of patients aided was 18,236.

During 1955 the Commission licensed 154 local, general, and allied hospitals and 2 nursing homes. An amendment by the 1955 General Assembly of the Hospital Licensing Act required licensing of nursing homes by the Commission. 175 hospitals and clinics were surveyed. Those that were not licensed included for the most part small clinics with less than 10 beds.

Another very important activity of the Medical Care Commission is the loans to medical students. Thus far 105 students have been approved for loans under the Student Loan program. 12 students of medicine and 1 of dentistry who have been approved for loans have completed their training and are now practicing in rural areas of the State.

Finally, while much has been accomplished by the Commission in North Carolina towards more and better hospital facilities, there still exists rather urgent needs for further additions and construction in hospital and public health facilities in the State.

Respectfully submitted,
Fred C. Hubbard, M.D., Chairman
William R. Floyd, M.D.
Charles I. Harris, Jr., M.D.
George W. Holmes, M.D.
Junius W. Davis, Jr., M.D.

Committee On Public Relations

A few of the highlights of the Committee on Public Relations activity will be given here. More details will be given by Mr. Barnes and Mr. Hilliard.

One major aim of this year's Public Relations

program has been the development and projection of a Society policy of bringing to the students and to the training level of future practicing physicians vital information in the general areas of the art of the practice of medicine, public relations, and the economics of medicine. We feel that some progress has been made toward that objective through the device of a slight change in the subject matter covered in the Annual Public Relations Conference which was held this year at two of the medical schools located in the state.

The Annual Public Relations Conference was held in Winston-Salem on February 22, 1956, aimed primarily at the students and house staff of Bowman Gray School of Medicine. The total attendance was 209 of which 120 were physicians, 59 were medical students and 30 other guests. The same conference was held the following day in Durham presented for the medical students and house staff of both Duke University Medical School and the University of North Carolina Medical School. The total attendance in Durham was 336 of which 71 were physicians, 60 were guests, 232 were Duke University Medical Students and 2 were University of North Carolina Medical Students giving a grand total of 574 persons registered at the two conferences.

On January 15, 1956, the committee met in Durham with the Deans of North Carolina's three Medical Schools for a discussion of the objective of making medical students more cognizant of the problems facing the profession today particularly as these problems relate to the art of the practice of medicine, public relations, and the economics of medicine. Recognizing that the present school curricula touch to one degree or another on some of the subjects in these three areas, the Committee is undertaking to ascertain what topics are presently being covered by the schools in the area of the art of the practice of medicine, public relations, and economics. This information is anticipated to be in hand at an early date, whereupon the Committee stands ready to assist and has offered such assistance, in obtaining Medical Society speakers for those needed topics not already a part of or adequately covered by existing curricula.

The High School Essay Contest was held for the period January 1-February 26, 1956. The results of this High School Essay Contest will be announced at the Annual Meeting of the Medical Society on May 1, 1956. However, the Committee is planning a careful analysis of the Essay Contest to ascertain whether or not the project should be continued as a part of the Public Relations program. It is the consideration of the Committee that some evaluation should be given to the project since we do feel that much of the participation does not represent the contestant's individual effort. Other worthwhile projects of a similar nature will be explored with the idea of recommending an alternate project.

A Medical Society State Fair Exhibit was sponsored again by the Public Relations Committee during the State Fair in Raleigh. The Annual State Rural Health Conference was held at the Sir Walter Hotel in Raleigh on October 6, 1955, and Regional Rural Health Conferences were held in Clinton on March 1, 1956, and in Hickory on March 14, 1956, with the cooperation of the Public Relations Committee, sponsored by the Rural Health Committee. The Public Relations Committee cooperated by handling the publicity for these occasions and supporting the efforts for other aspects of the programs.

The Public Relations Bulletin has been continued on a monthly basis and enjoys, according to many reports, increased readership among the Society membership. The newsworthiness of this organ is generally recognized and as a media for expeditiously reaching the membership with messages and information of import it is increasingly obvious that the Committee has reached a practical media in the publication of the Public Relations Bulletin.

Dr. John S. Rhodes, on behalf of the Committee, attended the Public Relations Institute conducted by the American Medical Association August 31-September 1, 1955 in Chicago. He also attended an October 22, 1955, AMA called session of State Society Officers, Legislative and Public Relations Committees on pressing matters related to national policy and impending Federal legislation, as well as a Southern Regional AMA Legislative Conference in Atlanta, Ga., on November 6, 1955. Dr. Rhodes appeared, with other Society Officials, before the Senate Finance Committee in Washington, D. C., on February 22, 1956, in clarification of medicine's position on the impending Federal Legislation which has been discussed in all medical circles throughout the state this fall and winter.

Transcribed Radio programs on health topics have been scheduled over approximately 16 stations in North Carolina, and a number of Television films on health topics have similarly been arranged over the television outlets in this state.

A study of the relationships between the press and the medical profession, undertaken by the University of North Carolina School of Journalism in cooperation with the Public Relations Committee, begun during the term of last Year's committee, has been continued and is nearing completion. An evaluation of this study is anticipated within a few weeks. Meanwhile, the Committee does wish to thank those physicians who have cooperated with the University of North Carolina study by returning the questionnaires received, noting that the returns were unusually good, running from 60% to 80% depending on category and location, which is well above average for any type of survey.

Respectfully submitted,

Amos N. Johnson, M.D., Chairman

John S. Rhodes, M.D.

Fred K. Garvey, M.D.

Committee On Mental Health

1. The Mental Health and Doctor's Rehabilitation Committee of the State Medical Society has had three meetings during the past year. All were held in the Sir Walter Hotel, Raleigh, N. C.

As you may know, this Committee has four sub-committees working simultaneously and they report to the full committee at their regular meetings.

1.

Dr. Joe Stevens of Greensboro is chairman of subcommittee on relations of medicine and psychology. His committee is working the representatives of the State Psychological Association. Since they apparently are not making plans to change their status in the immediate future, no recommendations are made at this time.

2.

Dr. R. Burke Suitt of Duke Hospital, chairman of the subcommittee on Seizure Control, reports a projected survey of the State Epileptic population. Since very little help is offered in the state to aid these unfortunate people it is felt that a survey of the situation is imperative. Dr. Suitt and Dr.

Roger Howell propose to use Durham and Orange Counties as a sample for a pilot study.

There are three hundred doctors in each county who will be asked to give identifying data on all convulsive patients during the calendar year 1956.

II. The next questions concern finance. Dr. Suitt estimates that something over \$5000.00 (five thousand dollars) will be needed for this State. It was proposed that funds be solicited from existing foundations such as the Children's Bureau and the Lennox Fund. If some money could be raised and we take as much as \$500.00 (five hundred dollars) for doing the survey it was asked that the committee be allowed to use the \$500.00 given annually by the State Medical Society for this purpose. If the survey proves worthwhile, the Governor will be asked to set up a committee on Seizure Control for the State of North Carolina. A Committee composed of Mr. Charles Warren, Dr. Robert Fink, Dr. Lloyd Thompson, Mrs. Tom Grier and Dr. Roy Norton have been appointed to look into the financial resources available from the Foundations.

III. Dr. Marshall Fisher, Chairman of the subcommittee on recommendations for Legislation concerning Mental Health had a meeting of his Committee consisting of Dr. Leslie Hohman, Dr. Arthur H. London, Jr.; Dr. James T. Proctor of Chapel Hill, Dr. C. V. Tyner of Leaksville; Dr. Amos N. Johnson of Garland; Dr. Lloyd Thompson and Dr. James Murdock. They report that since no changes in our laws on emotional disturbances as related to disorders of sexual behavior which are of medical significance, have had no changes for the past one hundred years, it has recommended that the Governor be asked to appoint a committee to study this program and make recommendations to the Legislature. Dr. Murdock was asked to draw up a new set of commitment laws to be presented to the next Legislature.

IV. Dr. Tom Jones, chairman of the committee on alcoholism. His committee consists of Dr. J. E. G. McLain of Durham, Mr. S. Kinion Proctor of Raleigh, Dr. Warren Carr, Durham, Mr. Worth Williams of Greensboro, Dr. John Ewing of Chapel Hill, Dr. Richard Proctor, Winston-Salem. It was generally agreed that this committee could best serve by creating interest on the part of the physicians to accept alcoholism as a sickness. Dr. Jones has attended a meeting of the National Committee on Alcoholism in New York, he was also given a full page write-up on Sunday, January 15, 1956 in the Durham Morning Herald for his work on alcoholism.

1. It is recommended that this Committee be instrumental in forming a State Alcohol Committee and use a nucleus to the local alcoholic committee throughout the State such as the ones now in operation at Durham, Greensboro, Winston-Salem and Elizabeth City.
2. Put on an educational program getting physicians to accept alcoholics as a sick patient.
3. Back the alcoholic program at Butner.
4. Encourage the correct educational program on alcoholism for high schools, etc.
5. Meet with Blue Cross Insurance Companies and ask that insurance for alcoholics be established the same as for other ill patients and that the hospitals be encouraged to accept these patients.

We have been working with the State Mental Hygiene Committee of the Medical Auxiliary in which we have asked that they disseminate information on the Alaska Territorial Mental Health Act over the State through other local auxiliaries and ask them to be in touch with their Senators and Representatives to help defeat this bill.

Mr. Richard Bostwich of Smith-Kline and French Laboratories in Philadelphia asked this committee to back a program on Psychiatry and General Practitioners at the State Meeting. This would be a closed circuit on TV, the show lasting one hour. Since the program for the 1956 meeting was already set up and since lack of space and time were not available at Pinehurst, it was recommended that they sponsor this program for the State Academy of General Practitioners. They were referred to Dr. Fred Patterson of Chapel Hill, chairman of this program committee.

Respectfully submitted,
 Allyn B. Choate, M.D., Chairman
 George C. Ham, M.D.
 Thomas T. Jones, M.D.
 Joseph B. Stevens, M.D.
 George Mundorf, M.D.
 Lloyd Thompson, M.D.
 R. Burke Suitt, M.D.
 James T. Vernon, M.D.
 Luther R. Doffermyre, M.D.
 M. J. Hornowski, M.D.

Committee On Archives Of Medical Society History

The Committee held no meeting during the year. Several dates were tentatively set but each time some conflict arose which made cancellation imperative. This we deeply regret, as several conferences should have been held. This committee has a very vital and important function to accomplish.

Undoubtedly much of the medical history of our Society is dormant but available in the records and memory of older members. Some effort was made in 1950-1953 to collect data through local committees of the county medical societies. Further suggestions along this line were discussed at the Committee meeting in 1955 and it was agreed that effort should be stimulated. This phase should be one of the major undertakings of your committee.

Much accumulated history of medical education in the state has been obtained by Dr. W. C. Davison, Dr. C. C. Carpenter, and Dr. W. Reece Berryhill pertaining to the history, development, and growth of our three medical schools. Dr. H. A. Royster has accumulated vast knowledge of the medical history of our state society. Dr. Hubert Haywood has made a study of the public health movement in our state and an effort will be made to document this phase of our program. Miss Dorothy Long of the Library of the School of Medicine at the University can contribute much data and has written several articles concerning schools conceived and operated by individual doctors which became more or less formal as schools of medicine. Dr. William P. Richardson has taken much interest in postgraduate instructional work and will be asked to develop this phase of medical educational history.

With a permanent home headquarters for our N. C. State Medical Society now underway, we can contemplate a permanent library for accumulation and use of this valuable data. This information is worthy and vital to the story of North Carolina medicine. We recommend that the Society continue the Committee on Archives of Medical Society History.

Respectfully submitted,
 Ernest W. Furguson, M.D., Chairman
 John L. Winstead, M.D.
 James B. Bullitt, M.D.
 S. Clay Williams, M.D.
 Ivan M. Procter, M.D.
 Charles F. Strosnider, M.D.
 Wilbert C. Davison, M.D.
 Frederick R. Taylor, M.D.

Committee On Scientific Exhibits

The importance of the scientific display technique in medical education, both at the under-graduate and graduate level, cannot be over-emphasized. As an efficient feature of programming in societies of a national scope one must remark upon the growth and excellence of these displays.

Your state society has shown a remarkable growth over the past decade, too, in as much as there has been evidence of increasing interest by out-of-state physicians in displaying at our annual sessions. In 1955, with extra improvised facilities, more than fifty scientific and educational displays were registered representing many states. This interest has been generated by efforts of your committee in spotting material all about the country to which invitations are extended. The Executive Secretary's extensive inspection and visual evaluation of displays at AMA Meetings involving nearly a thousand inspections has contributed to the screening task which the Committee undertakes in lodging its invitations to individuals.

Withal, nearly twice the number of displays listed, in the 1956 Program and as can be accommodated at the Carolina Hotel in Pinehurst, applied to the Committee for space. It is regrettable that so many excellent exhibits had to be declined and, indeed not a few cancelled, because space could not be suitably devised.

Finally, the technical exhibits, represented by the detail-men and pharmaceutical houses, was a complete sell-out in the Fall of 1955 and many subsequent requests for space have of necessity been declined over the past six months, although the 1956 Annual Sessions is still two months away. A tremendous amount of effort must be put upon details to produce this show and its accumulated success of the past few years is attributable almost solely to the headquarters staff and its leadership.

The Society should through every member participation, visit and patronize the technical exhibits and the companies their detail men represent. Moreover, it should continue its program of recognizing the service-worth of detail men and the part they play in modern medical practice by the dissemination of useful information essential to rapid introduction changes and obsolescent in new therapeutic preparations, substances and materials. Go by the exhibits and gain in useful knowledge by such contacts.

Respectfully submitted,
 Lenox D. Baker, M.D., Chairman

Committee On Military Service

On June 20, 1955, the following telegram was submitted to our Representatives in Congress:

"As Chairman of the Military Affairs Committee of the Medical Society of the State of North Carolina with a membership of approximately 3,000 I wish to voice strongest objection to continuation of Doctor Draft Act. Urge your support in effecting a change in this legislation. As Councilor for the Sixth District of our State Medical Society comprising the counties of Alamance-Caswell, Durham-Orange, Franklin, Granville, Person, Vance and Wake, I make similar representation."

Aside from this and other methods of objection to such legislation, this Committee has nothing to report.

Respectfully submitted,
 George W. Paschal, Jr., M.D.,
 Chairman
 Ralph J. Sykes, M.D.

Paul E. Jones, M.D.
 John P. Bond, M.D.
 H. Mack Pickard, M.D.
 L. Everett Sawyer, M.D.
 Thomas D. Slagle, M.D.
 Richard L. Masland, M.D.

Committee On Insurance Forms

During the past year this Committee dealt with the subject of simplified and uniform medical report and hospital report forms related to health and accident insurance claims for benefits.

This Committee considered and favored the adoption of such forms as had been developed by joint study and recommendation by the American Medical Association, The American Hospital Association, the Health Insurance Council and the International Claims Adjusters Association.

At a Committee Meeting in September a member of the North Carolina Hospital Association was invited to attend our deliberations in order that he and his organization might be appraised of the feeling and intent of the Medical Society of the State of North Carolina. On two occasions this Committee and representatives of the State Medical Society made representation to our Commissioner of Insurance supporting the use of the uniform insurance report forms (specifically HAP-4; IHF-1; GD-1; GDS-1; GS-1; ID-1; IDS-1; and IPHS-1).

While this Committee did not feel that these forms were perfect in every respect it did feel that they were satisfactory for the time being. Additional suggested improvements were also made to the Commissioner of Insurance as well as to the joint group which had developed these forms. On 15 November the Commissioner of Insurance rendered a decision which was in effect approval of our recommendations.

Respectfully submitted,
 George W. Paschal, Jr., M.D.,
 Chairman
 Frank W. Jones, M.D.
 Arthur H. London, Jr., M.D.
 Walter S. Hunt, M.D.
 Harold Kernodle, M.D.
 Wayne J. Benton, M.D.
 Julian Jacobs, M.D.

Committee On Hospital And Professional Relations And Corporate Practice of Medicine

The Committee met in Raleigh, N. C., Sunday, November 19, 1955, and was presided over by the Chairman, Dr. F. M. Simmons Patterson of New Bern, N. C. Present were (12):

Claude B. Squires, M.D., Charlotte
 Hubert McN. Poteat, M.D., Smithfield
 Harold B. Kernodle, M.D., Burlington
 Joseph B. Hankins, M.D., Lexington
 John P. Davis, M.D., Winston-Salem
 John H. Keller, M.D., Ahoskie
 Victor M. Crescenzo, M.D., Reidsville
 James Tidler, M.D., Wilmington
 G. W. Murphy, M.D. (Proxy for Dr. James

Raper), Asheville
 James P. Rousseau, M.D., President, Winston-Salem

James T. Barnes, Executive Secretary, Raleigh

The meeting had been called by the Chairman to explore such areas of responsibility as involved the Society and the function of this committee; particularly in relation to developments which might cite trends which are taking place in the State and to denote progress in dealing with problems in the area of the profession's relationship

to these corporations which share with medicine certain responsibilities in the support of the medical care which physicians are duty-bound to render to the people of the State.

President Rousseau was recognized for any elaboration he may have as to his concept of the Society's problems and suggestions to the Committee. Dr. Rousseau referred to state of developments in North Carolina which have profound effects upon the medical profession, the health service needs of the people, and upon the relationships of medicine to many facets of corporate enterprise which was manifesting concern and planning, and devoting resources, all channelled toward interplay in the picture of medical practice. He cited the marked industrial growth of the state and its potentials, both in the development of demands for goods and services and, particularly, health and medical services which do involve, and which will continue to involve, the practice of medicine in variable schemes, which are having, and will, have a profound influence on the quality of medical service and the standards of medical care which is available to the people of the state. He remarked upon the rapid growth of "Health Plans" in the country and the inevitability that such will be excited within the labor and management movements of industry in the State and medicine will certainly become involved in whatever schemes are promulgated and had best take stock before any trend toward group plans of medical care and exclusive panels of practice are developed and progressed within the State. He expressed concern that a clear public policy should be sought not only as a guide, but to assure that proper considerations be given to preserving those standards of medical care for which the profession, the public and modern medical science had sacrificed so much to achieve.

Mr. John Anderson, attorney, representing the Society, was recognized and reviewed from a manuscript (such is available for the record) an extensive brief which had been prepared at the invitation of the Board of Medical Examiners related to the issue of the statutory limitations on the practice of medicine. Referring to the Medical Practice Act he emphasized: the language "the person" in the requirement of qualifications to practice medicine; the pronouns "he", and; other personal requirements which, in his opinion, restricted license to practice medicine "only to a natural person", leading to the observation that a corporation cannot meet any such qualifications. Mr. Anderson cited many court holdings in relation to other personal practiced professions, particularly cloaked with authority by law, all indicating a personal right of the individual which cannot be delegated to a corporate body. He explored in general the states which have given court expression or high legal opinion on the subject, somewhat demonstrating the preponderance of the general rule of law upon which other states have excluded the corporate practice of medicine.

In Mr. Anderson's discussion there were points of evaluation of what a corporation may do, and what it may not do under the statutes. Comparisons as to statutory description of the practices of radiology, pathology and anesthesiology indicating sufficient expression of the statute on the former and lack on the latter two. Also as expressed under the statutes, "hospital has no patients", or the physician "has the patient"; so if hospital practices unlawfully under guise of hospital service, there is no excuse that statute

does not authorize a particular form of medical practice. Pathology or anesthesiology may still be regarded as the practice of medicine which a corporation may not lawfully engage in.

Mr. Anderson in discussing ethics, as expressed by the AMA and adopted by the State Society, took the view, "a physician is prohibited from permitting his services to be exploited to the benefit as a profit to a corporation." This would be "splitting fee with a corporation" and such exploitation would be unethical. The criterion of non-exploitation is the "last word" in the question of ethics—it means; does the corporation make a net profit on the services of a physician, if so it is unethical for a physician to permit this exploitation. The crux is the determination in any case whether the corporation realizes a profit or whether money realized by the corporation is in excess of: the salary paid a physician; the value of facilities furnished him and the value of services furnished him by his employer; if so it is equivalent to a profit (exploitative) and is deemed to have been produced from the professional effort of the physician and is, therefore, unethical (for it is exploitative).

It was consensus of opinion, individually and collectively expressed, that the brief expresses the sense of the Committee, and generally for the profession in the State, of a suitable point of view and that said brief should be presented as representing the views of this Committee.

Respectfully submitted,
F. M. Simmons Patterson, M.D.,
Chairman
John Haney Keller, M.D.
James Tidler, M.D.
Hubert McN. Poteat, Jr., M.D.
Joseph S. Hiatt, Jr., M.D.
Harold B. Kernodle, M.D.
Claude B. Squires, M.D.
Victor M. Crescenzo, M.D.
Joseph B. Hankins, M.D.
James S. Raper, M.D.
John P. Davis, M.D.

Committee On Occupational Health

The Committee on Occupational Health has been quite active this year. Two meetings were held and five members attended the A.M.A. Congress on Industrial Health held in Detroit, Michigan in January, 1956. Several members of the Committee plan to attend the Industrial Medical Society. Three members of the Committee have been called upon to conduct programs for County Medical Society Meetings. The chairman has requested that all members of the Committee be prepared to discuss problems pertaining to occupational health when called upon. A list of available speakers can be obtained from the Chairman.

The highlight of the year's work of the Committee was another (the third) Symposium on Occupational Health which was held at Chapel Hill on the afternoon of February 9th and an all day session February 10th. This symposium was jointly sponsored by University of North Carolina, The Liberty Mutual Life Insurance Company, and your Committee on Occupational Health. Dr. William P. Richardson, Dean of the School of Continuation Education and a member of your Committee did practically all of the work of arranging the program and securing the speakers. The Committee is indeed grateful to him for his splendid and untiring efforts.

An attempt was made to interest the employer group as well as doctors. The keynote address was made by Mr. Everett Morss, President of Simplex Cable Company of Cambridge, Massachusetts. The

problems of absenteeism, noise in industry, pre-employment and preplacement examinations and many other subjects of importance to both industry and the medical profession were ably discussed.

Attendance at the symposium was disappointing and it is felt that perhaps more publicity or perhaps some other means of approach should be tried.

At the September meeting of the Committee the problem of interval examinations of physicians was brought up by Dr. J. M. Hall. A subcommittee composed of Drs. Logan Robertson, Mac Roy Gasque, and J. M. Hall, as chairman, was appointed and that subcommittee's report was received and approved at the second meeting of the Committee February 9th. It was also recommended that a copy of this subcommittee's report be submitted to the President of the Auxiliary to the Medical Society. The report follows:

Purpose of Committee: To determine the advisability and feasibility of promoting periodic physical examinations among the members of the medical profession throughout the State.

The Sub-Committee met in Detroit, Michigan, on January 23, 1956. In addition to the Sub-Committee members H. L. Johnson, M.D., and Dr. Ernest Furgurson attended the meeting. The sub-committee felt that there was a need for periodic examination of physicians. There was considerable discussion on how examinations could best be promoted. It was generally agreed that multiple methods would be necessary to conform to local or regional situations. The following suggestions were presented and discussed:

1. Organization within the County Medical Society making use of the available physicians within the Society to do examinations.
2. Organization of specialized teams from medical schools to conduct examinations.
3. Use of trailers with examining teams to go throughout the state and conduct examinations.
4. Examinations should be done on a cost basis.
5. Standardized forms of an adequate physical survey should be used for the purpose of statistical study.

Respectfully submitted,
Harry L. Johnson, M.D., Chairman
Joseph A. Elliott, Sr., M.D.
William P. Richardson, M.D.
J. H. Patterson, M.D.
Mac Roy Gasque, M.D.
David A. Young, M.D.
Corbett E. Howard, M.D.
Manson Meads, M.D.
Logan T. Robertson, M.D.
Phil L. Barringer, M.D.
Ernest W. Furgurson, M.D.
David G. Bunn, M.D.
G. Norman Boyer, M.D.
Herman F. Easom, M.D.
Theodore S. Raiford, M.D.
John M. Hall, M.D.

Committee On Maternal Welfare

The "population explosion" of the past two years has resulted in a tremendous increase in the total number of maternal deaths for the year 1955. In addition, there was a rather marked increase in the rate as can be seen in table I.

Maternal Deaths By Years 1947-1955

Year	Livebirths	Maternal Deaths	Rate 1,000 Livebirths
1947	112,877	235	1.7
1948	109,430	284	1.9
1949	107,970	203	1.2
1950	106,486	202	1.2
1951	110,412	204	1.1
1952	111,000	200	1.0
1953	111,622	192	1.0
1954	114,563	148	0.8
1955	111,206	174	0.9

The rate of 0.9 per 1,000 livebirths for 1955 is a provisional figure based on certificates so far received by the Bureau of Vital Statistics. The increase in rate was suspected throughout the year from the number of death certificates being received, but it was hoped this would be found due to nonobstetric causes primarily. The subsequent breakdown, however, revealed that on a percentage basis toxemia and hemorrhage showed an increase while infection and other obstetric causes dropped. Nonobstetric certificates reported were about as had been noted in 1946 through 1951. This can be seen in table II.

Maternal Deaths By Primary Cause 1955

	Number	Percentage	1946-1951
Toxemia	56	32.1	26.4%
Hemorrhage	47	27.0	25.9%
Infection	4	2.3	7.3%
Other	36	20.6	24.8%
Nonobstetric	22	12.6	11.2%
Undetermined	9	5.4	4.4%
	174	100.0	100.0%

A comparison of the maternal deaths by race revealed an increase in the percentage of nonwhite maternal deaths from the early years of 1946 to 1951, Table III.

	Number	Percentage	1946-1951
White	57	33	41%
Nonwhite	117	67	59%
	174	100	100%

This latter table is of particular interest in view of the fact there are nearly twice as many white births as there are non-white. In 1940, the number of white maternal deaths was nearly twice that of the nonwhite. The figures show clearly that the most urgent problems are toxemia and hemorrhage in the nonwhite population of the state. The persistence of toxemia and hemorrhage as the two leading causes of maternal deaths indicates that considerable improvement is necessary in the obstetric care in the state and probably in the prenatal period. The rather marked reduction in the incidence of infection as a cause of maternal mortality can be attributed to improvement in overall obstetric care, but more due to the availability of antibiotics.

Examination of the place and attendant delivery of the births in 1954 reveals an increasing trend toward hospital deliveries particularly in the non-white group. However in that year over 11,000 patients, or 10 per cent of the total deliveries were performed by midwives. Table IV.

Place of Delivery 1954

	White No.-Per'tage	Nonwhite No.-Per'tage	Total No.-Per'tage
Hospital	73,542 96.3	21,193 56.0	94,735 82.6

Home—by	Physician	2,238	2.9	6,199	16.0	8,437	7.4
Midwife	594	0.8	10,797	28.0	11,391	10.0	
Total	76,374	100.0	38,189	100.0	114,563	100.0	

The first meeting of the entire committee was held January 23, 1955, at the Moses Cone Memorial Hospital in Greensboro. The committee was the guest of the Hospital for this meeting. In addition to the 8 members of the committee a number of guests from Greensboro were present. At the conclusion of the business a report was made concerning anesthetic deaths so far reported to the committee. These have been prepared for publication in the Medical Journal of the State of North Carolina.

The second meeting of the committee was held August 28, 1955, at the North Carolina Baptist Hospital in Winston-Salem, having been postponed from August 19. Eight members of the committee were present and an equal number of guests.

The problem of the method of reporting stillbirths and livebirths was discussed and the committee went on record favoring that such reporting be based on the weight, namely, 500 grams, rather than on the basis of uterogestation, as is now the law.

The large number of midwife deliveries, predominantly in the nonwhite group, and the increasing percentage of maternal deaths which are in this group plus the finding of the committee that the lack of prenatal care of inadequate prenatal care was a predominant factor in 80 to 90 per cent of the maternal deaths studied was discussed. The committee felt that it was essential that the Medical Society make a definite statement regarding their responsibility for the care of the obstetric patient. Accordingly a motion was made and passed that the Medical Society go on record as being willing to assume the responsibility of the care of the obstetric patients in the state.

The two preceding recommendations of the committee are to be referred to the Executive Council at their first meeting in 1956.

On October 20, 1955, a representative of the Maternal and Child Care Committee of the Council of Medical Service of the American Medical Association visited the State of North Carolina to survey the available facilities for maternal and child care. He was particularly interested in the activities of the Committee on Maternal Welfare.

On October 22 and 23rd, 1955, the Maternal and Child Care Committee met at Virginia Beach with representatives from the interested committees of the State Medical Societies of all the Southeastern States. The Committee on Maternal Welfare, the only group representing the Medical Society of the State of North Carolina, included Drs. James J. Donnelly, Joseph A. Gill and W. B. Cherney. Dr. Crawford, the Chairman from the Committee for the American Medical Association, pointed out that there were 52 city, county, and state committees listed as being devoted to maternal and child care. Of these only 14 were at all active. He pointed out that the purpose of the Committee from the American Medical Association is to review the activities and functions of the committees in existence in an effort to provide information, and to encourage the formation of such committees where they do not now exist.

A complete report of the Committee on Maternal Welfare of the Medical Society of the State of North Carolina was given and this report is in the files of the State Medical Society.

The Committee of the American Medical Association asked a number of questions of the representatives from North Carolina, which were as follows: 1. Has the Committee had any difficulty with lawsuits? Do you anticipate any difficulty? The answer was no. In view of the fact that the data are accumulated by mail, that any opinions are based upon an ideal set of standards, and that all identifying features are removed from the records, it was felt that any opinions rendered by the committee, or any of the material, would be invalid in court.

2. Does the Committee feel that the Medical Society should sponsor state legislation making such information inadmissible as court evidence such as was done in Minnesota recently? The answer was no for the obvious reason that any such action might call attention to the files of the Committee as a source of material for the courts.

3. Are the policies, standards, and definitions used by the Committee in the review of the records clearly defined in writing? The answer was yes, these had appeared from time to time in various reports to the Medical Society, in the minutes of the Committee, and in articles which were published in the Medical Journal of the State of North Carolina.

4. Were our definitions, et cetera, based on minimal standards or ideal? The answer was ideal. The Committee from the American Medical Association strongly recommended that any such standards be based on the ideal rather than on minimal standards.

5. How often was the composition of the Committee, including the chairman, changed? It was pointed out that although the Committee was appointed annually that the members were appointed for relatively long terms and in actual practice the membership has been fairly constant except for changes necessitated by death or by the wish of a member to retire from activity on the Committee.

6. What types of physicians are included on the Committee? It was pointed out that general practitioners, certified and noncertified specialists in obstetrics were included on the Committee. There was no pediatric representation. The Director of the Maternal and Child Health Division of the State Board of Health is an ex-officio member. The Committee of the American Medical Association suggested that pediatricians should be represented on such a committee as a general rule but in view of the fact that a separate committee on Child Health existed in North Carolina and that the two committees cooperated closely, the inclusion of a pediatrician was not essential.

7. Are consultants from other specialties used in the study of the cases, and, if so, how are they selected? Consultants from other specialties are used and usually selected from the medical school which houses the secretary and the files of the Committee.

The accumulated material in the files of the Committee was used for the following presentations:

"Maternal Mortality in North Carolina" January 28, 1955—Southeastern Branch North Carolina Public Health Association.

"Functions of the Committee on Maternal Welfare," Feb. 2, 1955, Craven County Medical Society.

"Obstetric Factors in Prematurity," March 23, 1955, Symposium on Care of Newborn, Reidsville.

"Some Common Obstetric Problems," May 25, 1955, First District Medical Society.

"Factors in Maternal Mortality in North Caro-

lina," June 1, 1955, Postgraduate Course—State Board of Health, Winston-Salem.

"Maternal Mortality," June 2, 1955, Bowman Gray Medical School—Second Year Class.

"Infant Mortality and Morbidity," July 22, 1955, Rutherford County Medical Society.

"Infant Mortality and Morbidity," July 24, 1955, Southern Pediatric Seminar—Oren Moore Lecture.

"Causes of Maternal Mortality in North Carolina," October 10, 1955, Union County Medical Society.

"Causes of Maternal and Infant Mortality," October 13, 1955, Stokes County Medical Society.

"North Carolina Committee on Maternal Welfare," October 22, 23, 1955, Committee on Maternal and Child Care, American Medical Association, Virginia Beach, Virginia.

"Use of Hormones in Obstetrics and Gynecology," October 26, 1955, Hoke County Medical Society.

The material in the files of the Committee were used for the following publications:

"Thromboplastic Complications of Pregnancy," by James F. Donnelly, M.D. and Paul R. Kearns, M.D. N. C. Med. Jr. 16:39-44, 1955.

"A Five Year Survey of Tubal Ligation," by Drs. F. L. Gobble, Tom Petty, and James F. Donnelly. N. C. Med. Jr. 16:133-136, April, 1955.

"Cardiac Conditions," Part V. A review of the First 1,000 Consecutive Maternal Deaths in North Carolina. N. C. Med. Jr. 16:504, 1955.

"The Anesthetic Hazards in Obstetrics" by Doctors Frank R. Lock and Frank C. Greiss, Jr. Am. J. Obst. & Gynec. 70:861-875, October, 1955.

"An Analysis of Maternal Mortality due to Anesthesia in North Carolina," by Doctors D. LeRoy Crandell, Frank C. Greiss, Jr., and James F. Donnelly. (In Press).

Financial report for the year 1955 is as follows:

Receipts:		Disbursements:	
Medical Society of		Salary	\$2,280.00
N. C.	\$2,600.00	So. Sec. Tax	45.60
Sale of Reprints	19.50	Postage	45.00
		Stationery	59.80
		Questionnaires	25.10
		Discs & upkeep	27.00
		Typewriter	
		ribbons	10.41
		Reprints	43.00
		Meeting	
		expenses	37.28
		Bookkeeping	50.00
		Misc.	8.63
\$2,619.50		\$2,631.82	

James F. Donnelly, M.D., Chairman, Raleigh

Glenn E. Best, M.D., Clinton

Guy H. Branaman, Jr., M.D., Raleigh

Avon H. Elliot, M.D., Raleigh

Walter O. Duck, M.D., Mars Hill

William A. Hoggard, Jr., M.D.,

Elizabeth City

Jesse Caldwell, Jr., M.D., Gastonia

Joseph A. Gill, M.D., Elizabeth City

Frank R. Lock, M.D., Winston-Salem

Hugh A. McAllister, M.D., Lumberton

George O. Moss, M.D., Rutherfordton

Robert A. Ross, M.D., Chapel Hill

Committee To Extend The Annual Sessions

This Committee has had no real function but to standby during the year due to uncertainties which have prevailed as to the Annual Sessions following marked changes which are authorized in the membership of the Society. It is our view that

some of these uncertainties will be resolved at the 1956 meeting.

In the meantime the Audio-Visual Postgraduate Instructional Program does constitute an "extension of the Annual Sessions" and the Committee on Audio-Visual has somewhat emphasized this program for the year so as to more nearly meet some of the needs of the membership for advancing medical information.

Further, it should be stated that the possibilities of "forced programming" in another host community for 1957 leaves many inponderables as to how effectively an Annual Sessions might be extended. Therefore, it is the recommendation that no departures in the extension of the Annual Sessions be decided upon for the time being, but that the Committee as a function of the Society be continued another year in order to sense fully the situations and developments which will characterize the Societies' scientific, business, and economic affairs in the coming months of 1956.

Roscoe D. McMillan, M.D., Chairman
Red Springs
Paul W. Johnson, M.D.,
Winston-Salem
Millard D. Hill, M.D., Raleigh
Lenox D. Baker, M.D., Durham
Paul F. Whitaker, M.D., Kinston
Warner Wells, M.D., Chapel Hill

Committee On Veterans' Affairs 1955-1956

The Committee on Veterans' Affairs has been continuously active during the past year. There have been three meetings of the entire committee, much correspondence with participating physicians, and representation at a national meeting in Chicago on January 9, 1956.

The functions of this committee have been divided as follows:

- I. Home Town Medical Care for Service-Connected Veterans.
- II. V. A. Hospital and Clinics—to improve relations between home town doctor and disabled veteran and veteran administration physicians.
- III. Legislation and Education in regard to Veteran Affairs. To coordinate and promote such efforts by the A.M.A.
- IV. To assist the N. C. Liaison Committee on Veterans' Affairs.

During the past year we have been primarily occupied with nurturing and improving the Home Town Care Program. Each month 600 or more practicing physicians treat service-connected disabled veterans in their home towns. During the past year nearly 2,000 individual practicing physicians participated. The average physician treats three veterans during the year. There are nearly 2,900 members in the N. C. Medical Society, of these about 300 do not treat private patients, and another 300 or 400 limit their practice to pediatrics and obstetrics and therefore are not eligible for this program. We are justly proud of the fact that almost every eligible physician participates in the Home Town Care Program. We believe the availability of such a high percentage of physicians to treat service-connected veterans speaks well for our organization of the Home Town Care Program and free choice of physicians by disabled veterans. This has been true with the old fee schedule as well as with the new fee schedule recently inaugurated.

Why such a well functioning organization is under attack by the Veterans Administration is not easy to understand. The Veterans Administration

invited the N. C. State Medical Society and the N. C. American Legion to organize the Home Town Care Program in North Carolina in 1946. The Hospital Savings Association was invited to set up the administrative machinery. These three organizations have nurtured this program and made it what it is today.

Since about 1952, the Veterans Administration, under Chief Medical Director Admiral Boone, and since 1955, under Dr. W. S. Middleton, has repeatedly advised and ordered us to discontinue the Intermediary—namely, the Hospital Savings Association.

Due to the persistent urging by the Veterans Administration this committee, in January, 1955, recommended to the executive council that the "intermediary" be terminated, even though the program had been entirely satisfactory to the Medical Society, Veterans Organizations and obviously to the participating physicians and the sick veterans. Subsequent to the adoption of this recommendation by the executive council, Mr. Barnes and Dr. Owens received other advice which indicated the advisability of maintaining the present program until the forthcoming changes in the Veterans Administration had materialized. This obviously referred to the assumption of duties as Chief Medical Director by Dr. W. S. Middleton.

It appears that Dr. Middleton did not visit the grass root communities before writing the letter of October 24, 1955. In this letter addressed to the presidents of the eight State Medical Societies still utilizing an intermediary, he advised that the intermediary be discontinued before July, 1957. The reasons for this request were based on economy, duplication of effort, and failure to fully utilize existing V. A. facilities. No data to support these assumptions have been made available.

A meeting was held in Chicago on January 9, 1956 with representatives from the eight states involved; namely, California, Michigan, Colorado, Oregon, Washington, Wisconsin, North Carolina and Hawaii. Physicians, service organizations and intermediaries were represented, and it was generally agreed that Dr. Middleton had not been properly informed and that his statements are without factual data to substantiate them. It was concluded to request a meeting with Dr. Middleton and the representatives of the other interested parties; namely, the physicians, service organizations and intermediaries to further discuss this problem.

The economy factor consists of \$28,000 per year for the intermediary in North Carolina and \$350,000 per year for the eight states. The 1956 Veterans Administration medical budget of \$790,000,000 provides 1% for payment to physicians on a fee basis and 8% or \$66,000,000 for the operation of 99 Veterans Administration Clinics. Approximately 1/3 of the fees paid under the Home Town Care Program have been to physicians for compensation evaluation examinations, without frequent unfavorable repercussions, due to the integrity of the home town physicians. These examinations are a legitimate function of Veterans Administration Clinics and probably should be totally divorced from the Home Town Care Program.

The utilization of available Veterans Administration facilities has a variety of implications. If the government expands the use of these facilities for more outpatient care, it will mean more veterans losing the opportunity of free choice of physician, losing time from work and losing the

convenience of seeing his home town doctor when his medical needs are urgent as well as the value to be gained in personal patient-physician relationship.

The duplication of effort refers to the duties of the intermediary and the Veterans Administration regional office in issuing authorizations, payments, etc. This we understand is true only because the Veterans Administration insists on duplication. But even if some duplication does exist, the intermediary is essential to nurture patient-physician and Veterans Administration relationship.

It has been the understanding of this committee and the physicians of North Carolina that the contract between the Veterans Administration, the Hospital Saving Association of Chapel Hill, N. C. and the N. C. Medical Society originally entered into in 1946 and renewed annually ever since was intended to enable the veteran to obtain outpatient medical care for service-connected disabilities in his own community with free choice of physicians.

Because we think we are right in this concept, the committee has voted to propose the following resolution for adoption.

WHEREAS the Committee believes that veterans with service-connected disabilities will receive the best medical care available by North Carolina physicians through continued use of the Intermediary Plan and

WHEREAS the Veterans Administration has not shown by comparable cost figures that there would be any saving by cancellation of the Intermediary Plan,

This Committee recommends a RESOLUTION that the Intermediary contract administered by Hospital Saving Association (The Blue Shield Plan) and sponsored by the Medical Society of the State of North Carolina, be continued without interruption.

If this RESOLUTION is accepted by the Executive Council of the Medical Society of the State of North Carolina:

This Committee recommends that the President of the State Medical Society request a meeting, along with personnel representing other intermediary states, with Dr. Middleton, Chief Med. Director of the VA.

That the President point out to the AMA Council on Medical Services the advantages of the Intermediary Plan to the 40 non-intermediary states.

That copies of the RESOLUTION be distributed to all North Carolina Congressmen,

That the Committee support a similar Blue Shield Intermediary Plan for the medical care of the dependents of military service personnel who may be legally entitled to medical care under a program offering free choice of physician and fee for service payment.

Samuel L. Elfmon, M.D., Chairman,
Fayetteville
Eben Alexander, M.D., Winston-Salem
Vernon L. Andrews, M.D., Mt. Gilead
Everett I. Bugg, Jr., M.D., Durham
Robert L. Garrard, M.D.,
Greensboro
Vernon W. Taylor, Jr., M.D., Elkin
John C. McLeod, Jr., M.D.,
Goldsboro
John B. Hickam, M.D., Durham
John T. Sessions, Jr., M.D.,
Chapel Hill

Committee On Rural Health And Education

I am happy to give you a report from the Society's committee on Rural Health and Education.

The following schedule of meetings was observed throughout the year, 1955-56:

1. Committee meetings were held on June 29, October 6, 1955; and January 25, and April 29, 1956. The Advisory Committee met with us in two of the meetings.

2. The 8th Annual State Rural Health Conference sponsored by this Society was held in Raleigh on October 6, 1955 with approximately 450 attending representing 43 agencies and 50 counties. The major topics for discussion were Farm and Home Accidents and Mental Health. Both of these subjects received favorable comment and many organizations expressed a willingness to use the ideas in follow-up work in rural groups.

3. The eastern Regional Rural Health Conference for 1956 was held in Clinton on March 1, 1956, with 225 persons attending from a wide area. At this meeting the themes followed were Farm and Home Accidents and Hospital and Accident Insurance. There was a 4-H Club demonstration of "Care and Handling Farm Chemicals and Poison." Also a summary of a Beaufort County Health survey by public health officials in that county. Dr. Donald Koonce, President-elect of the State Medical Society was present.

4. The Western Regional Rural Health Conference was held in Hickory, North Carolina on March 14, 1956 using the theme, "Your Health is Your Future." This meeting was attended by 233 registered representatives from more than a dozen counties in the west. They held discussions on Farm and Home Accidents, Hospital Insurance, and How to Help Your Doctor Help You. Again, a 4-H team demonstrated "Farm Chemicals and Poisons." Dr. J. P. Rousseau, President of the Society, attended this conference.

5. County conferences on health and medical care problems were held in Sylva and Bryson City during the month of November with several hundred persons attending these meetings at the county level.

It has been noted that approximately 75% of the persons attending regional and county health meetings have never attended one of the annual state meetings. This means we are getting ideas to new people all of the time.

Activities of the committee have included:

1. Enlargement of the Advisory Committee which was reactivated in 1954 and increased in 1955 to 18 members representing 15 public agencies, farm organizations, educational, civic and community groups. Through this committee the Rural Health Committee has gained insight into health and medical problems existing over the state. These non-medical lay persons as advisors have given very fine support and cooperation to the Rural Health program in all of its projects and activities.

2. Each county medical society was encouraged to appoint a county Rural Health chairman with committee members from his own Society to serve as contacts for the state committee, to assist in local programs, and to serve as liaison contact for local lay groups. In 1955 we had 52 such county rural health chairmen.

3. During the months of July and August, 1955, the three counties of Cleveland, Sampson, and Jackson cooperated in a non-fatal accident study with physicians, dentists, home demonstration leaders, Farm Bureau, Grange, and Public Health personnel collecting the data. This data was summarized by the accident prevention section of the

North Carolina State Board of Health and was released to the public for the first time as a part of the 8th Annual State Rural Health Conference. Results from this survey have been given wide distribution in the press and by radio and television. A number of other states are now making similar surveys. Two simple truths were disclosed: (a) that farming is a more dangerous occupation than we thought. (b) that the kitchen and back yard are the most dangerous places in the home.

4. The committee financed a 4-H Club group Health winner's trip to the National Club Congress in Chicago at a cost of \$165. Through the committee the Society is giving one year subscriptions of "Today's Health" to all county 4-H Club Health winners.

5. The committee is at the present time assisting in the filming of a fifteen minute story of 4-H Club health education and activities. This film will be used with youth and adult groups to stimulate interest in proper health and medical care. It will be shown to 250,000 4-H Club boys and girls and perhaps a like number of other lay and medical groups. This committee's financial commitment is \$750.

6. Assistance was given the state 4-H staff and the agents in Cherokee and Clay Counties in presenting the health pageant given last July during 4-H Club week at N. C. State College. Physicians from these two counties helped finance the trip to Raleigh.

7. 4-H members presented a team demonstration at the State Rural Health Conference and also demonstrations at regional conferences.

8. The leaflet, "Check Your Health" which was prepared in 1954 by this committee was reprinted in 1955 at a cost of \$293.28, and made available to a large number of lay groups interested in "Regular Physical Examinations and Use of the Family Physician."

9. The committee, though the health consultant, assisted closely in planning ten area training meetings on cancer control for Home Demonstration Club leaders. A number of local physicians were enlisted for each of these ten meetings and gave helpful information on the medical aspects of cancer detection treatment, medical research and hope for the future. These physicians were selected and contacted by the Society's committee on cancer control.

10. Members of the committee and the advisory committee made a study of the Beaufort County Health Survey conducted by Dr. L. E. Kling and his associates in Beaufort County in 1955. This survey demonstrated cooperation by the medical society, public health officials, Home Demonstration Clubs, Woman's Club, and other lay groups in the promotion and follow-up of selected "health checks" on a voluntary basis.

11. The consultant attended and participated in the Stanly Home Demonstration Achievement Day program in November.

12. Attempts have been made through the year to extend fullest cooperation to the activities of the Farm Bureau, Grange, Civitan clubs, all organizations of the Extension Service and many organized community groups. One of the encouraging things in this part of the committee work is that local physicians all over the state are being found in some of these organizations either as members or as consultants or in an advisory capacity.

13. The physician's placement service of the Society is under the direction and guidance of the Executive Secretary, Mr. James T. Barnes. How-

ever, the committee asked the health consultant to assist Mr. Barnes especially when problems concerned rural committees. In this work she visited thirty separate communities with repeat visits to several and with much correspondence and telephone calls in trying to get new doctors located in communities where they were asked for or were needed.

14. The consultant also visited 28 individual counties where she contacted local physicians, agricultural leaders and public health personnel in the interest of the rural health program and other activities of the Medical Society.

15. The consultant has been actively engaged in community work with a number of other health agencies and has served as a liaison contact between these groups and the Medical Society.

16. The consultant has served as chairman of the editorial committee for the N. C. Health Council News Letter for the past year and has accepted reassignment for the coming year.

17. The consultant has attended national Rural Health conferences in Milwaukee, Wisconsin, and Portland, Oregon; attended a conference for schools and physicians in Highland Park, Illinois; and the AMA Clinical session and Public Relations Conference in Boston, Massachusetts.

18. The committee chairman was privileged to attend the 11th Annual Rural Health Conference sponsored by the American Medical Society at Portland, Oregon in March of this year.

Let us look just a moment at the "big picture" of the problem of rural health in North Carolina. We have a state of nearly 5,000,000 people with 3,000 physicians, 78 component medical societies, and also three medical schools with nearly 200 new doctors each year. More than 60% of this state's population is still rural or suburban and the problems of health and medical care of this great population group are intermingled with habits, traditions, and background of a truly rural society.

The Medical Society is only one of approximately 125 agencies and organizations in the state of North Carolina which professes to be interested and concerned with the problem of health and medical care in this segment of our population. Many of these organizations are tax supported.

In addition, the state is burgeoning with new industry and new community patterns are being developed in every county in the state. An average county of 50-60,000 persons may have as many as 100 or more separate and distinct community organizations centered around a church, high school, or some manufacturing plant. At least 100 or more communities having no physician, or only one, have requested one or more.

Further, let us consider that this committee has a two-fold purpose: (a) to bring the rural areas up to date in health and medical care through a process of education. (b) it was originally intended that this committee be a part of the total public relations program of the Medical Society. We still consider the work of this committee to be justified by its value as a creator of good public relations.

One further fact, the North Carolina Medical Society is a pioneer in this field. Of the 48 separate state medical societies composing the American Medical Association North Carolina is the only one to support a program of this scope and to the extent of employing a full time health educator and consultant. At this point, I wish to pay tribute to Mrs. Annette Boutwell for her splendid contribution in working with this committee, with other committees and among the people of this

state. In effect, she is carrying out the policies of the Society and this committee. The doctors get the credit, and the people of the state get the benefit. I also wish to commend and thank all the members of this committee for their faithful work and splendid cooperation during the past year. Without their help we never could have done the job.

In view of the above statements I wish to enumerate a few goals which I think the Society ought to keep in mind for long range planning.

1. Enlistment. We ought to seek to enlist more physicians at the county level to cooperate with public health officials, civic groups, lay groups and community leaders in what I wish to term "community planning." This community planning not only should include matters of health education and medical care, but anything else that will lead to community improvement, in which I have a strong feeling more doctors should take the lead.
2. Meetings. In addition to our annual state meeting I would like to propose that we have a series of district meetings in 1957-58. I recommend that we have rural health meetings in Medical Districts 1, 3, 5, 7 and 9 in 1957 and similar meetings in Medical Districts 2, 4, 6, 8 and 10 in 1958. In addition, where the occasion arises, it may be desirable to have conferences, seminars, and study groups on a community or county wide basis. Eventually each county society should support a meeting on health matters at least once a year.
3. Finances. At the present time, the finances of this committee are tied up in the budget of the Public Relations Committee and with the general administration. During the past year we overspent our budget. Not wastefully I think, but in carrying out projects authorized by the Society but for which cost was underestimated or not anticipated. I recommend that the Council and Finance and Budget Committees consider the overall need of the committee on Rural Health and Education and set up a budget specifically for this committee. We want to do the job you outline for us and at the same time spend no more money than is budgeted. We would like to have the privilege of transmitting a budget estimate.
4. County Committee. Every one of the component county societies in our state organization should have a rural health and education committee with an active chairman.
5. Education. In the matter of education we need more of everything; more meetings, more pamphlets, more visual aids, more movies, more articles to the press, more messages by radio and television, more information to our youth groups, schools and colleges—in general, a wide range of facts about health, medical care, to every person who will be born, get sick and die or live healthily in our midst in this great state.

The people of our state know their health problems. What they do not know is that this Medical Society is able, willing, and ready to help them solve these problems.

It will continue to cost money, a lot of money! However, I believe that our health education dollars have been the most valuable dollars the Society has spent the past ten years and I think these dollars will pay dividends in the years to come.

Finally, it will take time—your time and my time and many more years of all our time to reach the goals we have set for ourselves.

W. Wyan Washburn, M.D., Chairman,
Boiling Springs
William H. Romm, M.D., Moyock
Rachel D. Davis, M.D., Kinston
W. Plato Starling, M.D., Roseboro
Thomas J. Taylor, M.D.,
Roanoke Rapids
Daniel S. Currie, Jr., M.D.,
Fayetteville
James Donald Bradsher, M.D.,
Roxboro
Vernon W. Taylor, Jr., M.D., Elkin
Charles E. Cloninger, M.D., Conover
Hugh A. Matthews, M.D., Canton
R. Vernon Jeter, M.D., Plymouth

A Report To House Of Delegates Of The Medical Society Of The State Of North Carolina From Hospital Saving Association

This is the 20th Annual Report from Hospital Saving Association to the House of Delegates. We can report completion of some of the projects mentioned in last year's report. It took practically all of 1955 to complete the process of converting over 5,000 groups to the new type of Blue Cross certificate which placed less emphasis upon benefits for "room" and more emphasis upon the heavy unpredictable expense of hospital extras and congenital conditions. Each group received a personal call from a representative of the Association so that the changes could be fully explained. We are proud that this major task was accomplished with a net membership loss of less than 1 percent.

The cost per case and the number of admissions per thousand members are the two major factors affecting cost of hospital coverage. The year just ended marked some kind of a plateau in both respects. The number of new beds built in 1955 in North Carolina is not so great as in recent years. The incidence of admission has leveled off. The cost per case, although still increasing, has not risen so sharply. As a consequence of these things the Association can report a good financial year:

	1955	Increased over 1954
Assets	\$3,866,030	22.5%
Reserve for Unpaid Claims	1,223,717	10.8 (57.5
Legal & Operating Reserve	1,542,066	58.4 days of
Benefits Paid (including		claims)
VA Program	9,007,158	4.17
Administrative Expense	991,193	0.98

With these changes behind us the entire emphasis for 1956 is on membership growth. The Sales and Advertising Departments have embarked upon the 1956 sales program with enthusiasm and energy which is already producing results. Group coverage for the new and expanded industry which has come to North Carolina has converted many areas from rural to industrial. This offers the greatest membership potential. However, special emphasis is being placed upon means whereby coverage will be easily and readily available to people not eligible through groups and whereby organized farm people can obtain coverage on a group basis. Special arrangements have been made with the North Carolina Grange and six members of their organization given special training and licensed to sell Blue Cross-Blue Shield coverage to Grange members. A full-time representative has been appointed to work with a Community Development Organization which seeks to raise both the standard of living and the health standards of families

within a community area. A full-time supervisor has been employed to promote the sale of non-group memberships through part-time representatives in small towns. As reported last year, physicians have been of much assistance in helping us locate respected, well-qualified persons as part-time representatives.

Effective January 1, 1956, the Association's Polio Rider was increased to allow benefits up to \$7,500 and the Rider was extended to include 9 other diseases. This is the first step in the rapidly developing new field of dread diseases or catastrophic coverage. The Association has given much consideration and study to this new approach to health insurance so as to be ready to meet public demand.

During 1955 the VA Home Care Intermediary Program gained new significance in that there is pending congressional action on medical care for the dependents of military servicemen. If such service is provided through civilian hospitals with free choice of physician and fee for service payment, and if handled through Blue Cross-Blue Shield, it would be an administered program exactly like the VA Home Town Medical Program. Unfortunately, there is now again as last year, a determined effort by the VA to cancel this program. While the outcome cannot be predicted, there appears to be a renewed realization on the part of the medical profession that the medical programs of the VA can easily be the backdoor to socialized medicine, and understanding on the part of service organizations that in this issue, the interest of the veteran and the interest of the physician are the same. The Committee on Veterans Affairs of the State Medical Society under the competent chairmanship of Dr. S. L. Elfmon, has given generously of its time and efforts and dealt very capably with an exceedingly complex matter. The Association is indebted to this Committee.

By far the most significant development in Blue Shield has been the work of the Medical Society's Blue Shield Advisory Committee in preparing a revised Doctors Program with increased schedules of benefits and increased income limits. We believe that the new Program meets realistic standards for today's economic conditions. As in previous years, this well-informed and able group has given much of its time to help work out answers to some of the baffling questions in the economics of medicine. Dr. Arthur H. London, Jr., who succeeded Dr. O. Norris Smith as Chairman, has directed this committee's work in the development of the new program which is of critical importance to the future of Blue Shield. If this new program is ratified by the House of Delegates, it should give much impetus to the sales program. Due to the many mergers that have taken place in industry, more and more group accounts are sold on a national basis to companies with employees in two or more states. The proposed new Doctors Program meets present national Blue Shield standards and should help greatly in the enrollment of national accounts represented in North Carolina.

The Physicians Relations Department of the Association has made every effort to keep all doctors' offices supplied with pertinent data and forms and sought to aid young doctors setting up their first practice. As in years past and unto an even greater extent, the Association has benefited by the cooperation and counsel of Mr. James T. Barnes, Executive Secretary, N. C. Medical So-

ciety and his able assistant, Mr. William N. Hilliard.

E. McG. Hedgpeth, M. D. Medical Director, Chapel Hill

Committee Advisory On School Health And State Coordinating Service

The Committee met in Raleigh, on July 10, 1955, with Dr. J. W. R. Norton, State Health Officer, Dr. Charles Carroll, State Superintendent of Public Instruction and a committee from the State Dental Society, to discuss fees for school health work so as to make it entirely uniform over the entire state. The Dental Society representatives were of the opinion that such system would not work with them specially and nothing was done at the joint meeting. However, later in the day the Medical Society Committee on School Health met and recommended that the fees developed for the Doctor's Plan of Insurance and as modified should be used as a basis, cutting these 40%. In other words paying 60% of the fees as outlined in the Doctor's Plan of Insurance. This was recommended to the Executive Council of the State Society which approved it and the schedule was sent to the Coordinating Service on School Health. Later the chairman interpreted this to mean that the fees for office visits should be 60% of the \$3 fee listed for a hospital visit under the plan and that the drug fee should be 60% of the usual charge. On October 12 to 14, 1955, the chairman attended a meeting of the Fifth National Conference on Physicians and Schools held by the American Medical Association in Highland Park, Illinois. This was a very enlightening conference and was very helpful in helping to understand more fully the importance of school health work. The report of this is on file in the Medical Society office. The theme at this conference was to consider the total child, that is, his physical, mental, social, emotional, moral, and athletic problems and try to adjust his surroundings to his needs. It was emphasized that the school health work should be brought down to a local level and that frequent conferences be held at this level so as to keep everyone, especially the parents, familiarized as to the program.

Respectfully submitted,
W. T. Rainey, M. D., Chairman

Supplement To Report Of Committee Advisory To School Health And State Coordinating Service

On the 5th National Conference of Physicians and Schools held by the American Medical Association at Highland Park, Illinois, October 12, 14, 1955. The Medical Society was also represented by Mrs. Annette S. Boutwell, Rural Health Consultant. The program was well arranged and the attendance and interest shown were excellent. Included among the speakers and counselors were: Samuel Brownell, Commissioner, Office of Education and Dr. Leonard Scheele, Surgeon General, Public Health Service, both of the Department of Health, Education, and Welfare in Washington. Also Dr. George F. Lull, Secretary-General Manager of American Medical Association, Mrs. Rollins Brown, President, National Congress of Parents and Teachers, W. W. Bauer, M.D., Director, Bureau of Health Education, American Medical Association, Elmer Hess, M. D., President, American Medical Association and others actively interested in school health. They presented their view points on education, public health, medicine, dentistry, and the home. The chairman attended the group on the Personal Physician and Dentist and School Health. This group discussed (A) How Best the Interchange of Medical Information About Pupils

Between the Personal Physician and the School Physician, School Personnel, Community Agencies, Nurse and Others Interested Could Be Made Easy and Ethical; (B) How Can the Personal Physician Assist the Individual Schools in the Development of a School Health Program; (C) What Can Be Done to Obtain a Desirable Degree of Uniformity and Adequacy in the School Health Examinations Given by Personal Physicians in Their Offices; (D) How Can the Personal Physician Make an Effective Contribution to School Health Programs When the School District Has A Full Time School Physician; A Part Time Physician; A School Nurse or Public Health Nurse Only. (E) What Advantages or Disadvantages Exist When the Physician's Portion of a Child's Health Appraisal Is Performed by His Own Personal Physician in His Office. (F) Should the Personal Physician Make School Examinations for His Private Patient? Who Furnishes Report Forms; What About Fees, Parents Approval for the Transmission of Pertinent Data To the School. (G) How Can the Personal Physician Receive Full Information on School Health Programs, Including an Understanding of the Physical Education and Athletic Programs. (H) How the Personal Physician Relates to the School and Home When He Is Dealing With His Child Patients. (I) Accumulative Records and the Private Physician.

These questions were discussed freely and from all angles and the following conclusions reached:

There should be a physician on the school boards who could act somewhat as Liaison Officer Between the local Medical Society and the School Health Program, who would be familiar with the Medical Society's ideas to school health work and in cooperation with the Public Relations Committee of the Medical Society could be of great assistance in educating the public as to the importance of the program. The School nurse is more familiar with the pupil's health and should be the main source of information to the physician. Conferences between the school nurse, the school teacher, physician and dentist relative to a pupil would be a great help in evaluating his trouble and, if necessary, treatment. The physician could further be of great assistance in getting the parents' consent to divulge pertinent information to the school physician or nurse and could assist very greatly the health authorities in educating the parents as to the importance of follow up examinations or treatment of the child.

There should be close cooperation between the family physician and the school health services. This could be done by forming a School Health Council consisting of members from the Department of Public Instruction, Medical and Dental societies and Public Health. They could form the policies and pass these down to the local level and have frequent local school health conferences to stimulate interest locally in the program, to further help to familiarize the physicians with the program, the State Medical Society's Journal could devote an issue to the subject of school health. There should be devised a uniform examination form and these should be in the hands of every practicing physician in the state so that he can familiarize himself with it and the family physician could be advised of all findings. This would give uniform information on all children. To go back further, it might be of great help to include a course in medical school curricula on training medical students on school health examinations.

Where there is a full time school physician the County Medical and Dental Societies could approve the plan and be familiar with it. This would help get the cooperation of the parents and see that the program is adequately executed. The ideal examination would be better done in the family physician's office, thereby continuing the patient-physician relationship which is so necessary in medicine and get the child accustomed to the same physician in health and disease. By doing this the parents naturally would assume more responsibility in seeing that the examination done in the school, is that the records would be more uniform, more complete, and, of course, on file accurately in the school.

Along with this there should be an accident prevention program and equipment in the school to meet any emergencies that might arise, especially during athletic programs. Recent figures show that 40% of all deaths from ages 5 to 14 are due to accidents.

Another problem which is not given much consideration is the mental and emotional attitude of children. Few of us realize that one out of every twelve children spend some time in a mental institution. Maladjustments at school, in classes, in athletics, in social contacts play a great part in this and this should be given close consideration in any school health program.

By close team work between all the agencies interested in child welfare and school health much has been done but there is still a lot to do. In this way the total child would be studied including his physical, emotional, social, moral and athletic aspects.

By keeping complete records of each child much can be learned about him during his school life and this would be of great help in some cases later in life.

More studies should be devoted to the school athletic activities; how to recognize and handle injuries occurring therein. The emotional aspects of athletics should be studied and these activities should be studied and these activities so planned as to prevent so much emotional upset. The whole theme of the conference was to consider the child as a whole and develop the program with this idea in view and bring it down to the local level.

Respectfully submitted,
W. T. Rainey, M. D. Chairman
Charles H. Gay, M. D.
Amos N. Johnson, M. D.
John F. Barber, M. D.
Virgil H. Duckett, M. D.
James A. Harrill, M. D.

Liaison Committee To The North Carolina Pharmaceutical Association

This Committee held its meeting at the Sir Walter Hotel in Raleigh on January 13, 1956.

The Agenda for the meeting, prepared by our Executive Secretary, Mr. James T. Barnes and Mr. W. J. Smith, Secretary of the N. C. Pharmaceutical Association, is given below:

a. Discussion of possible matters of mutual interest:

(1) Amendment to Federal Social Security Act (HR 7225) establishing a class of permanent and totally disabled recipients of benefits which will encompass a system of compensation, rehabilitation, medical determinations, medical care,

inclusive of drugs and supportive types of care with implications on socialization of medicine and pharmacy.

- (2) Provisions of the Keogh-Jenkins Bill for self-employed in reference to establishing trust funds for retirement from tax exempt personal earnings.
 - (3) Potentials of the international treaty powers of the Executive Department and the Senate of the United States in respect to the proposals of the Bricker Amendment.
- b. The inter-professional problems of poliomyelitis vaccine distribution.
 - c. Inter-relations on the subject of hospital pharmacies.
 - d. The desirability of promoting local services for pharmaceutical establishments and personnel to individual grievances on the part of related professionals and the public.
 - e. Bilateral participation in health forum discussions particularly in regard to the miracle drugs, their high costs and their efficient contribution to medical care and early rehabilitation.
 - f. Inter-relations of the two professional groups on additional problems:
 - (1) Narcotics
 - (2) Barbiturates
 - g. Educational programs, particularly, motion picture resources in contributing to medical education programs at the post-graduate level.

The meeting was attended by President Rousseau and Secretary Barnes of the Medical Society of the State of North Carolina; Dr. Joseph B. Warren, member and Dr. Paul F. Whitaker, Chairman for the Medical Society. The members from the Pharmaceutical Association present were: Roger A. McDuffie, W. L. West, Wade A. Gilliam, W. S. Wolfe, Secretary W. J. Smith and President W. B. Gurley of that Association.

The agenda prepared was discussed in detail by the representatives of the two organizations.

President Rousseau, ably assisted by Secretary Barnes, gave an excellent and complete analysis of legislation now before the Federal Congress. They recommended opposition to HR-7225, and the pharmacists agreed with us to oppose this resolution in every way possible.

The representatives of the two organizations agreed to support the Keogh-Jenkins Bill, and while there were some differences of opinion, they also agreed to support the Bricker Amendment to the Federal Constitution.

The polio vaccine situation was discussed in some detail and followed President Rousseau's recommendation that the two organizations should (a) stimulate through educational programs the efficacy and wisdom of administering the vaccine, and (b) that the vaccine should continue in private control but both organizations should work harmoniously with the Health Departments in a county basis according to local conditions.

The foregoing were the only specific actions taken. The meeting was cordial and harmonious, and it was the opinion of the members of your committee present that it served a good purpose in ventilating the mutual interests and problems of pharmacy and medicine.

Respectfully submitted

Paul F. Whitaker, M. D., Chairman
 Roscoe D. McMillan, M. D.
 Charles R. Welfare, M. D.
 Clyde Hedrick, M. D.
 Joseph B. Warren, M. D.

Report To The House Of Delegates Of The North Carolina Medical Society April 30 And May 1 And 2, 1956 By The Three Physician Members of North Carolina Medical Care Commission Who Were Nominated For Appointment To The Governor By The Medical Society

The three physician members of the North Carolina Medical Care Commission who were nominated by the Medical Society have reported to the House of Delegates each year since 1946 on the history, program, and achievements of the Commission. At the 1955 meeting they reported that during eight years of construction, 193 projects, involving an expenditure of approximately \$78 million and the addition of 5,402 new beds in local general and State-owned hospitals, had been approved by the Commission. They also reported that 72 hospital projects, 34 nurses' residences, 45 health centers, and 8 State-owned projects, or a total of 159 projects had been completed and were in use.

Since March 15, 1955, 33 additional projects, including 16 hospitals, 13 health centers, one State-owned facility, one diagnostic and treatment center, one rehabilitation hospital, and one chronic disease hospital unit, and providing a total of 558 new patient beds, have been approved by the Commission. The addition of the 33 projects brings the total number of projects approved by the Commission during the nine-year period, July 1, 1947, to June 30, 1956, to 226 of which 179 are completed, 25 are under construction and 22 are in the planning stages. The total cost of the 226 approved projects is estimated at \$87,290,592 of which Hill-Burton funds provided \$31,738,299; State funds, \$16,064,855; and local funds, \$39,487,438.

Progress during the year March 15, 1955, to March 15, 1956, as well as during the nine-year period of construction, July 1, 1947-June 30, 1956, is reflected in the attached table which lists the 226 projects approved according to type of project, stage of completion, and new beds provided.

For the current fiscal year, the Commission received \$3,949,179 of Federal funds but no State funds for hospital construction. Accordingly, when the accrued balance of State funds to the Commission's credit is exhausted, but Federal funds continue available, it will be necessary for the local sponsors to supply the entire cost of projects less the amount of Federal funds available at the time. Federal participation at present is on 50 per cent basis.

The Medical Facilities Survey and Construction Act of 1954 amended the original Hill-Burton Act to include nursing homes providing skilled nursing care under medical supervision, diagnostic and treatment centers for ambulatory out-patients, rehabilitation facilities providing medical, psychological, social and vocational services to handicapped or disabled persons. A fourth category, chronic disease hospitals, while eligible under the original Act was also designated in the amendment. For the fiscal year 1955-56, the Commission received \$707,120 in Federal funds toward the construction of these medical facilities. During the year, and included in the 226 approved projects, the Commission approved three projects that qualified for aid under the expanded program.

Other activities of the Commission include aid toward the cost of Hospital Care of Medical Indigents, Licensing of Hospitals and Nursing Homes, and a Student Loan Program. During the calendar year 1955, the Commission paid \$315,633

Table Showing Type and Number of Hospital and Medical Facilities Constructed
In North Carolina With Aid From the Medical Care Commission Since Federal and
State Funds Became Available in 1947

Stage of Completion	Local General Hospitals		State-Owned Hospitals		Health Centers	Nurses Residences	Diagnostic and Treatment Centers	Rehabilitation Facilities		Chronic Disease Hospitals		Total No. of Projects	Total New Beds
	No. of Projects	New Beds	No. of Projects	New Beds				No. of Projects	New Beds	No. of Projects	New Beds		
Completed prior to March 15, 1955	72	3910	8	627	45	34	0	0	0	0	0	159	4537
Completed March 15, 1955 to March 15, 1956	8	406	0	0	11	1	0	0	0	0	0	20	406
Total completed to March 15, 1956	80	4316	8	627	56	35	0	0	0	0	0	179	4943
Under contract March 15, 1956	12	393	1	100	8	4	0	0	0	0	0	25	493
Planned March 15, 1956	12	397	1	18	6	0	1	1	29	1	80	22	524
TOTAL: July 1, 1947- June 30, 1956	104	5106	10	745	70	39	1	1	29	1	80	226	5960

to 129 North Carolina hospitals that provided hospitalization for a total of 18,236 medically indigent patients.

The Commission's work of licensing hospitals has involved visiting approximately 175 hospitals and clinics. In 1955, licenses were issued to 154 local general and allied hospitals having a bed capacity of 13,889 or 98.7% of all general hospital beds in North Carolina. The hospitals that are not yet licensed represent, for the most part, physicians' clinics having less than ten beds.

Following action by the 1955 General Assembly which amended the Hospital Licensing Act to require the licensing of (nursing) convalescent homes, the Commission established reasonable standards for construction, equipment and staffing of nursing homes that will safeguard the health and welfare of the patients and aid the owners in planning the correction of existing deficiencies. Thus far, two privately owned nursing homes in the State have been licensed by the Commission. Additional nursing homes are presently being examined and it is expected they will be licensed shortly.

One hundred and five students have been approved for loans under the Student Loan Program. Of these students, 12 enrolled in the State-owned mental hospital program and the balance in the rural program. At present, 12 students of medicine and one of dentistry who had been approved for loans by the Commission have completed their training and are now practicing in rural areas of the State.

In summary, although gratifying progress has been made in North Carolina in increasing medical and hospital facilities, the need for more medical facilities and better hospitals has not been met.

J. Street Brewer, M.D., Roseboro
Wm. M. Coppridge, M. D., Durham
Harry L. Johnson, M. D., Elkin

Committee On Voluntary Prepayment Programs Of Health Services

Introduction

This Committee was appointed to work out a plan for taking care of the per diem costs of hospitalization of the indigent patient and the medically indigent patient. These are the two groups that cannot pay the full cost of medical care. The indigent patient is able to pay little or nothing. The medically indigent patient is able to pay part of the cost, but not the full cost. Any such plan will have to be put into effect by the State Legislature. The State, together with the local communities and other available sources, should take care of the full per diem cost of the indigent patient. The medically indigent patient should, when possible, be sold voluntary insurance with a premium he could afford, with as much coverage as this premium would give him, and on his leaving the hospital, the State and the local community should pay the balance of his hospital bill. (This patient will hereafter be referred to as belonging to the number two medically indigent group.) Such a plan would go a long way toward completing our North Carolina Good Health Plan.

At present, the hospitals themselves are losing most of these bills, or are passing on the major part to patients who are paying, because of this, higher rates than they otherwise would. These indigent and medically indigent patients are being paid for, but not from the proper sources. It is certainly more the duty of the local community and the State to pay this bill than it is the duty of someone who is already burdened and sick. We

want to get the per diem cost of these patients from the proper sources: in the case of the indigent patient, from the funds set up by the Foundations, etc. and from the State and local community; in the case of the medically indigent, from the State and the local community, the patient himself and any other available sources.

Purposes

This Committee recommends that the House of Delegates of the North Carolina Medical Society, its Insurance Committee and any other group that it chooses to work through, attempt to get the State, through the Appropriations Committee of the Legislature, to subsidize the balance of the indigent patient's bill for hospitalization. It is the idea of this committee that the balance of these patient's bills shall be divided between the county and the State, but combine so that the total payment will complete the per diem cost of both these groups of patients.

This plan will only take care of those groups not already covered. It will not encroach on any existing hospitalization plans, such as those for tuberculosis, crippled children, etc. This money paid by the State and the county will help every licensed hospital in this state. It will help the local people and their local hospitals. It is hoped that the Legislature can be convinced that it is the State's and the counties' responsibility to take care of the balance of the indigent and medically indigent patients' bill not taken care of by the existing agencies or by insurance or by the individual.

Present Status

Part of the cost of the indigent patient's bill is already being taken care of by various available funds—from the Duke Foundation, State Funds, the Reynolds Fund, certain Federal funds and certain funds from the counties. The hospitals themselves are either losing such part of the per diem cost as is not met from these sources, or are letting the other patients absorb it. The rest of the sick people in the hospitals, together with the hospitals themselves, are really paying what we would ask the State and counties to pay.

The State Board of Public Welfare has two classes of patients: the indigent and the medically indigent. Both of these groups are on the Welfare lists. Their medically indigent group is able to help a little with its hospitalization but is not able to buy insurance. We add to these two classes what we shall call the medically indigent group number two. This group is not on the Welfare list and is not being helped at present. It is able to pay part but not the full cost of medical care.

Recommendations

1. It is our recommendation that the members of this group (medically indigent number two) be encouraged by the proper authorities to buy as much voluntary insurance as they can afford. If they fail to buy voluntary insurance they should not be helped more than they would if they had bought it. The members of this group can afford to buy low-premium insurance, but not sufficient insurance to cover the total cost of their hospitalization in most cases. We, therefore, also recommend that the balance of this bill be subsidized by the State and county and also by the same agencies, if possible, as help to pay the indigent patients' bill.

It is the opinion of the Committee that the indigent patient should not receive a doctor's bill, but we feel that the medically indigent number two patient should receive a small bill, the amount to be decided by the patient and his doctor on a basis in keeping with the patient's income.

2. We recommend that the medically indigent patient, who is already on the Welfare Department's list, have his hospital bill paid from the available sources and by the State and county, on a per diem basis.

3. We recommend further that the State appropriate an additional \$375,000 per year for the Pooled Fund for hospitalization of public assistance recipients under the State Board of Public Welfare as the Welfare Department has requested. The State is already paying \$125,000. The additional \$375,000 from the State would mean that for the Pooled Fund there would be \$500,000 from the State, \$500,000 from the counties and \$1,000,000 from the Federal Government (matching funds). This would take care of a large part of the hospitalization of the completely indigent group. If the State decides to go ahead with the plan that we are suggesting, then this group, too, would be paid for completely. The now existing Foundations would pay as they are now paying and the balance of the per diem cost would be paid one-half by the Federal Government and one-half by the State and county.

Summary

North Carolina pays less than most states for the medical care of its indigent patients. In fact, it has done very little for them. The counties have been much more liberal. For the current fiscal year the 100 county boards of commissioners have appropriated just over two and one-half million dollars for medical care and hospitalization of people who fall in the various categories of indigency.

It seems to your committee that the remainder of this poor patient's bill is more the obligation of the State and county than it is that of the hospital and the hospital patient now absorbing the balance, and we feel that the Legislators will see and understand this if it is properly presented to them. We think that our Legislative Committee should present this appeal to every interested agency in North Carolina and get these agencies to participate in the program of informing the Legislators.

Finally, if the State, together with the counties, decides to undertake this program, the Pooled Fund which the Welfare Department is advocating would be complete and would pay the full per diem cost for the members of the completely indigent group. There is one advantage that should be mentioned right here: for every dollar that the State and county puts into this Pooled Fund, the Federal Government will put in a dollar. In the final analysis, the balance of this patient's bill, after the now existing agencies have paid their quota, would be paid half by the Federal Government and half by the State and county.

There were approximately 287,383 indigent patient days in North Carolina in one year. In giving us these figures the Welfare Department gave us their two groups for one year each, but not for the same year. From July 1, 1954 through June 30, 1955, there were 81,245 patient days for the care of recipients of public assistance. For the calendar year 1954, there 206,138 days of care for the certified medically indigent. So as said above, the total of these two groups over a one year period for each group is 287,383 patient days. These figures will help us determine how much money the State and counties will need to furnish for these indigent groups. Some of these patients belong to the Welfare Department's medically indigent group and allowance should be made for this. As for as the medically indigent group number two is concerned, it represents virgin territory and is something that will have to be explored by

the proper authorities, because we do not at present know the number of these people.

Respectfully submitted,
Wm. R. Stanford, M. D., Chairman
J. J. Combs, M. D.
Corbett C. Howard, M. D.
David Smith, M. D.
Wm. F. Eckbert, M. D.
Wm. Burch, M. D.
Mr. Marshal Pickens, Consultant

Committee On Scientific Awards

The personnel of the Awards Committee, as constituted in 1954, functioned at the annual meeting in 1955 appraising motion pictures, scientific exhibits, and other audio-visual media for the purpose of making the Gaston County Award at the annual meeting of the State Medical Society in 1956. Owing to the larger size of the Committee than previously constituted, of which four were present at the meeting, the operation was much more satisfactorily performed than in prior years. The Chairman is grateful to William S. Doshier, M. D., Verne S. Caviness, M. D., Charles M. Norfleet, M. D., and Mr. Emory Hunt for their ready and willing cooperation, and for their interest and care in carrying out their duties.

The policy of appointing an Awards Committee with large personnel has been continued, and it is hoped that it will operate as smoothly and as efficiently this year as it did last.

At the time this report is being prepared, the Committee is in the process of appraising manuscripts presented at last year's meeting for the purpose of selecting one each for the Moore County Award and for the Wake County George Marion Cooper Award.

As always, the Executive Secretary of the State Society, Mr. James T. Barnes, has been of incalculable help and support.

Respectfully submitted,
Rowland T. Bellows, M. D., Chairman
Charles M. Norfleet, Jr., M. D.
Jesse P. Chapman, M. D.
Ernest Craig, M. D.
George J. Baylin, M. D.
Wm. S. Doshier, M. D.
George W. James, M. D.
William O. Beavers, M. D.
Emory Hunt (Mr)

Committee On Vocational Rehabilitation

No complaints have been received by the members of the Committee or the Committee Chairman referable to specific grievances concerning the State Vocational Rehabilitation Program. Previous reports indicate clearly that the North Carolina Division of Vocational Rehabilitation is working in close cooperation with approved hospitals and the physicians of the state in providing services for those patients eligible for Vocational Rehabilitation aid.

Federal government has provided funds for increased help through Vocational Rehabilitation dependent on state matching funds. The provisions for the additional funds are similar to those which have existed in the past. There is little indication of infringement on the doctor-patient relationship.

Federal Funds for aid in establishment of Rehabilitation Centers are now available. These must be used in conjunction with State matching funds and other matching funds. Several organizations throughout the state are interested in construction of and promotion of a Rehabilitation Center for the use of all patients requiring such service, and some are reported to be underway. The purpose of

such a center would be to supply the eligible patient with necessary concentrated treatment through psychological evaluation, physical therapy, occupational therapy, brace therapy, job re-training after definite medical and surgical treatment have been completed by the patient's physician.

The Committee concluded upon three propositions: a. is recommended that all physicians, particularly those represented in the membership of the Medical Society of the State of North Carolina, become more familiar with the function and operation of the program of vocational rehabilitation offered by the State. It is especially urged that the "physical restoration" services be recognized as an area of responsibility on the part of the practicing physician for needy disabled persons in whom there remains a potential work capacity sufficient to a gainful and supportive employment; and that such recognition should imply a concern with guiding the disabled patient and the rehabilitation counselor into proper concepts of medical service and into a sound patient-physician relationship so that the essentials of good medical care may be maintained in a cooperative effort to rehabilitate the handicapped worker under the North Carolina Law. To the furtherance of this recommendation it is suggested that the Public Relations Bulletin and the North Carolina Medical Journal be used as media for informing the physicians of the State in regard to vocational rehabilitation.

b. That the component county medical societies offer the opportunity for local rehabilitation counselors to visit meetings and talk about the program and methods of extending services to the end that an educational service may be performed and a fuller understanding of the problem, professional relationships and the modus operandi of the program be established.

c. That a means be explored of taking fuller advantage of services incident to Industrial Compensation in cases, where the physician is charged with the medical care of the injured employee, so as to have earlier vocation rehabilitation evaluations of residual employment handicaps and undertake more vocational services during the course of treatment of the injured worker. To this end it is recommended that there be conference between the Committee Medical Advisory to the Compensation Commission Vocational Rehabilitation Division and the State Medical Society on the development of a suitable form of referral which the practicing physician would have at hand in effecting early referral and suggestion of rehabilitation services needed. In this connection this Committee recommends to the State Society that it indicate its sponsorship by financing the printing of such referral forms as a public service.

Respectfully submitted,
Roy B. McKnight, M. D. Chairman
Harry D. Riddle, M. D.
J. Leonard Goldner, M. D.
Malory A. Pittman, M. D.
Charles H. Ashford, M. D.
Thomas E. Forbes, M. D.
John P. Davis, M. D.

As a matter of information the following is an excerpt of the N. C. Statute authorizing vocational rehabilitation service.

GENERAL STATUTES OF N. C.

Article 29

Vocational Rehabilitation of Persons

Disabled in Industry or Otherwise

SECTION 1. Acceptance of federal aid.
The State of North Carolina hereby accepts all of

the provisions and benefits of an Act passed by the Congress of the United States to provide for the promotion of vocational rehabilitation of persons disabled in industry or otherwise and their return to civil employment, approved as Public Law 565, August third one thousand nine hundred fifty-four: Provided, however, that the State Board of Education is not authorized to accept any such funds upon any condition that the public schools of this state shall be operated contrary to any provisions of the Constitution or Statute of this State.

SECTION 2. Authority to cooperate and plan program of rehabilitation.

.....The State Board of Education shall have all necessary authority to cooperate with the Federal Office of Vocational Rehabilitation in the administration of the Act of Congress providing for the vocational rehabilitation of persons injured in industry or otherwise; to administer any legislation pursuant thereto enacted by the State of North Carolina; and to administer the funds provided by the Federal Government and the State of North Carolina. The Board shall have full authority to formulate plans for the promotion of vocational rehabilitation, and it shall have full authority, subject to the approval of the personnel Department to fix the compensation of such officials and assistants as may be necessary to administer the Federal Act and this Article for the State of North Carolina; and to pay such compensation and other expenses of administration as are necessary from funds appropriated under this law. It shall have authority to make studies and investigations relating to vocational rehabilitation; to publish the results of such investigations and to issue other publications as seem necessary to the Board; to promote and aid in the establishment of schools, departments, or classes giving instruction in vocational subjects for rehabilitation purposes; and to prescribe qualifications for the teachers, directors, and supervisors of such subjects.

The State Board of Education, in order to carry out the provisions of this Article, shall secure the cooperation of federal, State, and local health agencies in getting a complete report of any persons under treatment in hospitals, clinics, dispensaries, health officers and private physicians, for any injury or disease that may render them permanently, physically, and vocationally handicapped to such an extent that they are, or will be, unable to support themselves.

Committee To Study Medical Credit Bureau

The Committee to Study Medical Credit Bureau has not previously existed, nor did the need until recent years. It is understood that so many abuses in collection operations have developed; that marked exploration of physicians has taken place widely; that physicians frequently seek some guidance in the matter of locating competent collection services, and; that physicians frequently seek information of headquarters office for the evaluation of collecting agencies with which they have had experience, as well as to agencies which they propose to use or have proffered service, but about which they do not have adequate information. Therefore the Executive Council authorized a study of the subject and President Rousseau appointed this Committee in response to the Council authorization of the study. The Committee is composed of eight members, one of whom was added by the president after he had contributed vital consultant services.

The Committee has been instructed: "to investigate and make recommendations to the Executive

Council with reference to some plan of evaluating medical credit bureaus and of determining for the profession in general those 'fly-by-night' agencies which are inclined to operate throughout North Carolina."

At my request, the Executive Secretary prepared an agenda and called a meeting for October 14, 1955 at Winston-Salem. A quorum of the committee attended and several consultants representing physicians with experiences on one hand and collection agency administrators on the other attended and participated in the discussions. This agenda dealt with the following orientations:

- A. Preliminary considerations: History; known out-of-state collection operations and experiences, review of personal experiences, and; what credit bureau does.
- B. General Statments on the prevailing Medical Credit Bureaus established in the major cities of North Carolina.
- C. Need for Collection Services: Indicated by inquiries; indicated by stated grievances and complaints; public relations concern, and; consideration of policy on pre-service credit arrangements for patients.
- D. Collection Services now employed in general: Local Medical-Credit Bureaus (recognized); mail order solicitations for service of accounts; itinerant out-of-state representation, and; N. C. Merchant Association experimental proposals.
- E. Should State Society establish policy for guidance and protection.
- F. Administration in effecting such policy.
- G. Collaboration with accrediting agencies.

After a careful exploration of these items the Committee designated two subcommittees to engage in separate objective studies and report at a subsequent meeting. All agreed that problems prevailed that require exploration and recommendation, at least, in partial solution of these problems.

1. Letter of the Executive Secretary, June 2, 1955

In late October the Executive Secretary reported a survey schedule by Medical districts in North Carolina indicating 73 collection agencies of every description distributed over the state, but pointing to two districts with none at all wherein a combined population of slightly more than a half million people lived and within which 225 member-doctors practice. He commented as follows: "Very few of these 73 agencies are specialized from the standpoint of the establishment of procedures to handle medical accounts."

Second Meeting:

The Committee met again in Winston-Salem on March 9, 1956 at which time reports of the subcommittees were received, discussed and acted upon. The reports follow:

A. As Chairman of the subcommittee Dr. Howard Wilson reported that an informal conference was held in Raleigh on November 11, 1955, with Mr. Paull Prince and Mr. Odell Beroth, of Greensboro and Winston-Salem respectively, who represent in general the organized medical-dental credit bureaus at which was agreed that they would secure and submit all the information available on codes of ethics and relations in respect to credit organizations which possibly would have bearing on the situation in North Carolina. Moreover, they indicated a willingness to maintain a continuing perspective on the problem in general and to keep the Society informed in every practical manner as to the whole related field of credit organization and operation in the State. Dr. Wilson presented the standardization material representing the fol-

lowing formal organizations at the national level:

1. National Association of Medical-Dental Bureaus, Inc.
2. American Collectors Association, Inc.
3. Collection Service Division of Associated Credit Bureaus of America, Inc.
4. Specimen of account listing (complementing to North Carolina)

Each of the above have formulated a documentation of "objectives and purposes" as well as the rules and regulations which aid in the implementation of their "objectives and purposes." The subcommittee report of Dr. Wilson sufficed to say that all of these were salutary and tend to bind the agencies "accepted", everywhere, to the same standard of ethical procedure in relations of the agency to patron doctor as well as service to the public with which they deal as a result of subscription by the patron doctor. The documents referred to were filed with the Executive Secretary and will constitute valuable future reference material as the parent committee proceeds with its activities and recommendations for the future.

B. The subcommittee of which Dr. Fred Garvey was Chairman met on the night of January 31, 1956. Present at the meeting were: Dr. Fred K. Garvey, Dr. Ralph Sykes, Dr. Wayne Benton and Mr. O. D. Beroth, Collection Manager of the Medical-Dental Credit Bureau of the Winston-Salem Merchant's Association.

Realizing that there is a great problem in the medical profession as to a satisfactory handling of delinquent accounts and, further, realizing that there has been considerable confusion as well as a number of bad experiences with various unethical and so called "fly-by-night" collecting agencies, we have, with the help of Mr. Beroth, attempted a thorough study of the situation. We have found that a large area of North Carolina has no facilities for employing certified or approved collecting agencies and that by employing unethical out-of-state agencies many of its physicians have reaped grievous experiences as a result.

The feasibility of establishing ethical collecting agencies in those sections of the state not now covered by such service was discussed at length, and we reached the following conclusions:

1. Any county society wishing to establish such an agency in its section can do so by contacting its nearest credit bureau, there being such organizations in all principal towns of North Carolina, and if it can be shown that a collecting agency of the credit bureau is economically feasible, such an agency is likely to be established.
2. We do not feel that society owned collecting agencies would be advisable for North Carolina. We are not sure such agencies would comply with the limitations set forth in the code of ethics of the American Medical Association.
3. Any agency approved by the county societies should be a member of one of the following national organizations: (a) National Association of Medico-Dental Bureaus, Inc., (b) Associated Credit Bureaus of America, Inc., Collecting Service Division, (c) American Collectors Association, Inc.
4. No contact, written or oral, should be made with any collecting agency without a full investigation, including advice of legal counsel as to technical language of said contract.
5. All accounts should be controlled by the physician at all times, with rights to cancel or adjust as circumstances may warrant.

6. The Executive Secretary of the Medical Society of the State of North Carolina should keep available a list of approved agencies functioning in North Carolina and should advise, on request by any physician, in the selection of an agency.
7. All physicians who may have difficulty with any local collecting agencies should report same to the executive secretary of the Medical Society of North Carolina, who will report the matter to proper national organization of the agency for appropriate action.

Respectfully submitted:
 Fred K. Garvey, M. D.,
 Chairman, Sub-committee

After a full and complete discussion the following conclusions and recommendations were reached:

In line with the considerations of the Committee and discussions with President Rousseau, we report that it should be recommended to the House of Delegates that every doctor thoroughly investigate any proffer of service and decide carefully on his own part and perhaps seek the advice of his attorney before signing any type of contract for the collection of his unpaid-patient-accounts or giving the accounts over to a collecting agency and that it be recommended that they be sure such agency meets the requirements of (a) code of ethics of one or more of the agencies listed in Dr. Wilson's report and (b) the State Statutes as administered by N. C. Insurance Commissioner, Charles F. Gold of Raleigh, N. C. It was generally agreed that the Chairman should develop two articles on the subject each year to appear in the North Carolina Medical Journal which would be designed to alert physicians to steer clear of the "fly-by-night" collection service offered by itinerant representatives or agents and that each evaluate the proffered services and accept only sound services to deal with his patient accounts.

On motion duly seconded the Committee adopted:

1. Dr. Wilson's report as read.
2. Dr. Garvey's report as presented.
3. The plan for the publication of two articles annually to appear in the N. C. Medical Journal.

The Committee recommends to the Council that this report be adopted.

Moir S. Martin, M. D., Chairman
 Frederick K. Garvey, M. D.
 Wayne J. Benton, M. D.
 Roy B. McKnight, M. D.
 John W. Farthing, M. D.
 W. Howard Wilson, M. D.
 Bruno J. Romeo, M. D.
 Ralph Sykes, M. D.

Committee On Postgraduate Medical Study

The subject of postgraduate medical instruction is of ever increasing importance to the Society in effecting its generally expressed responsibility for the health of the people. Modern medical science is characterized by persistent change in the effective application of agents and reagents in the control, modification and elimination of organic diseases, as well as changes in the techniques which lead to the early detection, diagnosis and management of organic disease and in bringing into play factors which may, with equal importance, modify the emotional and neural states which are increasingly regarded as important in the manifestation of human illness. That is to say, that the art of the practice of medicine requires equal skill as practice requires knowledges related to all the elements of science. Thus it follows that in an era

where technology and discovery change rapidly, it is not only important but an obligation, that practitioners keep abreast of the march of medicine. One active in practice can no longer attain this end by the old scheme of deliberate interruption for study away from home in some recognized medical center of research and applied medical science. One must almost daily seek through the printed word, the audio-visual media, through live lecture and preception, and through the forensics of discussion, attain the progressive knowledge and techniques essential to an effective practice.

Therefore, the continuing effort of the profession, through its organized societies, must be kept up through the promotion of programs of a postgraduate nature, even of very short duration, i. e., by hour or day or by symposia-length programs designed to bring a concentration of medical information to the practicing doctor. These factors your committee has given much consideration during the year. We have explored new areas and new techniques which may be brought into play and have encouraged these at all levels where postgraduate information and instruction may be channelled. Essentially the following objectives have been sought:

1. To bring into some system of contact the experienced men in practice who can and will contribute to the young and training physician some of the benefits from the practice experiences.
2. To bring the practicing physician into contact with scientific progress as it is attained in the medical centers of research and teaching.
3. To promote the development and dissemination of postgraduate medical information by way of the audio-visual media, taking into consideration the broad field from which such resource material is available.
4. The Committee has authorized and caused to be published for distribution to the membership of the Society a second edition of the listings of "Postgraduate Medical Opportunities in North Carolina 1956".
5. Particular reference is made to an editorial in the March issue of the North Carolina Medical Journal on the subject of "Continuing Postgraduate Education". Points of contributors may well constitute some guide posts for our postgraduate direction.
6. Finally, an exploration of the potentials of televised programs has been made and it is recommended that the Society collaborate in principle, and in a modest way in connection with the financing of worthy production through the U.N.C. T.V service on specific projects recommended by the Committee and approved by the Executive Council.

In conclusion, we have cooperated in the independent survey which AMA Council on Education and Hospitals has recently conducted on postgraduate education, including North Carolina, and we shall look for some guidance from the situations revealed in this survey report as to how the Society may better implement postgraduate medical education in this State in the future.

Respectfully submitted,
 Amos N. Johnson, M. D. Chairman
 Wm. McN. Nicholson, M. D.
 John R. Bender, M. D.
 Wm. P. Richardson, M. D.
 Monroe T. Gilmour, M. D.
 John B. Anderson, M. D.
 Joseph B. Stevens, M. D.
 Courtland H. Davis, Jr., M. D.

Committee To Study Increment Of Medical Society Dues To Include Compulsory Amount Earmarked A.M.E.F.; (Included in regular dues)

The medical profession, generally speaking, is opposed to socialized medicine and to anything that may threaten to encroach upon personal privileges. The threat of government interference in this area is an ever present one. This is especially noteworthy in the field of medical education. Government subsidy of our medical schools would certainly be another important milestone in the direction of the socialization of the medical profession.

For a number of years our medical schools have been painfully aware of an increasing necessity for additional funds. Recent figures show that it costs over \$15,000.00 just to teach a medical student four years. This does not include the myriad of expenditures necessary to establish, maintain or expand.

With the above facts in mind the A.M.A. in 1951 established the American Medical Education Foundation and appropriated one million dollars to help get a program under way. This organization in conjunction with the National Fund for Medical Education, a lay Corporation formed for the same purpose, have raised and distributed with no strings attached several million dollars to our medical schools.

These grants are based on funds available and are made to all schools alike. (2 year schools get one-half as much as the regular 4 year schools). The amount allotted for each student enrolled is the same.

Total grants to our three North Carolina medical schools since 1951 amounted to \$284,957.10. The grants to our schools in 1954 amounted to \$66,515.00 and approximately the same amount was granted in 1955.

A large portion of the money raised by these foundations has come from nationally-known philanthropic foundations. When our solicitors have approached them for assistance one of the first questions asked has been. "What are the doctors doing about it?" Numerous grants have been received on a contingency basis.

Since 1951 considerable effort has been directed toward the solicitation of gifts for the A. M. E. F. from the profession in North Carolina. Last year an attempt was made to secure the assistance of the county societies and their auxiliaries. Pitt County established an enviable record. Many of the Societies failed to organize. During 1955 our contributions to A. M. E. F. amounted to \$5,736.25 which was only a little less than had been given in all of the preceding years. While our three North Carolina schools were receiving over a quarter of a million dollars from the National Fund, we gave approximately \$12,000.00

The Illinois Medical Society, recognizing the urgency of the situation, increased their membership dues \$25.00 per year and gave the increment to A. M. E. F. Last year their contribution amounted to \$188,153.31. Idaho, Nevada, Utah, Arizona and California have increased their dues for the same purpose. It is reported that Illinois is not very happy because more state societies have not done likewise.

In 1955 two of our County Societies unanimously recommended that the House of Delegates increase our dues for the benefit of A. M. E. F. The Surry-Yadkin County Society recommended an increase of \$20.00 per member and the Sampson County recommended an increase of \$30.00 per member. These requests were presented to our Executive Com-

mittee at its January 1956 meeting. President Rousseau appointed a committee to study the matter and requested a report. The committee was composed of Drs. William Coppridge, W. W. Kitchin, Clifton Davenport, Kenneth Carpenter, and H. L. Johnson, Chairman. A meeting was held in Chapel Hill on March 24th. It was agreed by the three members present and one who was unable to attend that the following recommendations be submitted:

1. It is recommended that the House of Delegates of the Medical Society of the State of North Carolina increase the annual membership dues by \$10.00 (ten dollars) effective January 1, 1957.
2. That the treasurer of the society have a roster of the dues-paying members prepared and together with that roster forward a check covering the increment in dues received to the Director of the American Medical Education Foundation on or about August 1, 1957 and each year thereafter until otherwise ordered.
3. It is further recommended that each member be allowed to designate a specific school to which his increment be forwarded by the A.M.E.F. if he so desires. All undesignated funds will be held by the A.M.E.F. for distribution among the medical schools in the United States.
4. It is recommended that a copy of this report be forwarded to the president of each county medical society before the annual meeting April 30, 1956 for information.

Respectfully submitted,

H. L. Johnson, M. D., Chairman

W. M. Coppridge, M. D.

W. W. Kitchin, M. D.

Clifton Davenport, M. D.

Kenneth C. Carpenter, M. D.

Committee On Emergency Medical Service

The Committee on Emergency Medical Service activities during the past year have been largely of a standby character. Until a firmer crystallization of thought determines the scope of medical responsibilities and functions concrete application of any program to meet the rapidly shifting concepts of Civil Defense against the enemy action becomes so amorphous as to make our previous plans obsolete. Mass evacuation as a means of combating the effects of the hydrogen bomb has entirely shifted the emphasis of requirements, in many instances, to a level where responsibility paradoxically returns to the individual citizen.

Civil Defense in general has assumed a larger role than previously in providing aid in natural disasters. In this field disaster teams such as once constituted our main organization against weapons such as an A bomb would coordinate well in this type of activity were they reviewed and made actively functioning units. Their relation to the problems of larger nuclear weapons makes them become a vastly inadequate mechanism. A much greater demand on the total medical resources will be necessary in such event but at present no worthwhile approach exists.

Further work has been done in the field of basic preparation and a very comprehensive study of hospital facilities has been done by Dr. George Watson in conjunction with the State Civil Defense Office.

Supplies intended to correct certain deficiencies in the previously purchased disaster kits have made these more useful, particularly in the field of anesthesia. There still remains unsolved the problem of acquisition and storage of morphine, and in

this sense our capacity to function is seriously hampered in spite of any progress made otherwise. These materials are stored at Civil Defense Headquarters in Raleigh. This is at present the best solution of storage needs, although they ultimately will be distributed to each Highway Department District.

Further attempts should be made to establish a reciprocal relationship with the Committee to establish blood banks throughout the state. Mutual support and the possibility of obtaining State and Federal matching funds for these banks would greatly enhance the value of both committees.

It is recommended that this committee be continued for the next year to continue functioning with North Carolina Office of Civil Defense in effecting active organizations in areas which are also actively organized in the other spheres of Civil Defense.

C. L. Royster, M. D., Chairman
 Heyward C. Thompson, M. D.
 Roy B. McKight, M. D.
 W. Walton Kitchin, M. D.
 George A. Watson, M. D.
 J. Kingsley McDonald, M. D.
 Fred T. Foard, M. D.
 Harry D. Riddle, M. D.
 M. J. Hornowski, M. D.
 Roger W. Morrison, M. D.
 Ben F. Royal, M. D.
 Furman P. Covington, M. D.
 Zack D. Owens, M. D.
 Newsom P. Battle, M. D.
 Felda Hightower, M. D.

Addendum To Report Of Committee On Emergency Medical Service

In reference to the stock pile of medical supplies, the items of streptomycin and penicillin procaine suspended in oil were scheduled to expire July, 1956 and July, 1957, respectively, despite one extension applied to these two preparations. We can now report that both of these antibiotics have been disposed of completely and this does not constitute a problem for the Committee until such time as there is a replacement of such expiring antibiotics.

C. L. Royster, M. D., Chairman

Speaker Murphy: At this point, with your permission, we will go back to the Constitution and By-Laws. When we adjourned for supper, we had finished the Constitution, and adopted the Constitution, and were about to begin on consideration of the revision of the By-Laws, so we will ask Dr. McMillan to take up on the By-Laws where we left off.

Dr. McMillan: Mr. Speaker and Members of the House of Delegates: We will pass on to the By-Laws, Chapter I—Membership.

BY-LAWS

Chapter I—Membership

Section 1. All members of the component county medical societies permitted and provided for by the Constitution and By-Laws of this Society and all members provided for by the Constitution who have been made members by the Council, Life Members, Affiliate Members or Scientific Members who have been made such Members by the Council, and who have paid their annual dues for the current year, shall be privileged to attend all business and scientific sessions of the annual meeting, and shall be eligible to vote and hold office in the Society.

Section 2. The name of a physician upon the properly certified roster of Membership and whose dues and assessments have been paid for the cur-

rent year, shall be prima facie evidence of his rights to register at the annual meeting of the Society.

Section 3. No person who is under sentence of suspension or expulsion from this Society or from any component society of this Society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Society, nor shall he be permitted to take any part in any of its proceedings until such time as he has been relieved of such disability; provided, however, that the Life Members of this Society shall continue as such notwithstanding they are dropped from the roll of the component society for failure to pay dues.

Section 4. Each member in attendance at the annual meeting shall enter his name on the registration book. When his right to Membership has been verified by reference to the record of the Secretary of this Society, he shall receive a badge, which shall be evidence of his right to all the privileges of Members at that meeting. No Member shall take part in any of the proceedings of an annual meeting who has not complied with the provisions of this section.

On motion, duly made and seconded, Chapter I was adopted.
 (Final action).

Chapter II—Annual and Special Meetings of the Society

Section 1. The Society shall hold an annual meeting at the time and place fixed by the House of Delegates at a preceding annual meeting, but in case a change of time or place or both should be considered necessary, the Executive Council shall have authority to make such change.

Section 2. Special sessions of either the Society or House of Delegates shall be called by the President at his discretion, or upon petition of forty delegates, or upon request of the Executive Council.

Upon motion, duly made and seconded, Chapter II was adopted.
 (Final action).

Chapter III—General Sessions

Section 1. The General Sessions of the Society are the meetings of the Members of the Society provided for in Article IV of the Constitution. Each General Session shall be presided over by the President or in his absence or disability or by his request, by one of the Vice Presidents. Before the General Session at such time and place as may have been arranged, the President shall deliver his annual address, and the entire time of the Session, so far as may be practicable shall be devoted to the delivery of papers and discussions relating to scientific medicine.

Section 2. The General Session, the House of Delegates and ad interim the Executive Council, shall have authority to create committees or commissions for scientific investigations and for other purposes of special interest and importance to the profession and public, and to receive and dispose or reports of the same; but any expense in connection therewith must first be approved by the House of Delegates, or by the Executive Council.

Section 3. Except by special vote, the order of exercises, paper and discussions as set forth in the official program shall be followed from day to day until it has been completed.

Section 4. No address or paper before the Society, except that of the President, shall occupy more than fifteen minutes in its delivery; and no Member shall speak longer than five minutes, nor more than once on any subject except by unanimous consent: Provided, that the terms of this section shall not apply to invited guests.

Section 5. All papers read before the Society shall be its property. Each paper shall be deposited with the Secretary-Treasurer when read, and if this is not done it shall not be published.

On motion, duly made and seconded, Chapter III was adopted.

(Final action).

Chapter IV—House of Delegates

Section 1. The House of Delegates shall meet annually at the time and place of the annual meeting of the Society. The sessions of the House of Delegates shall be held at a time to be designated by the Executive Council and to be published in the North Carolina Medical Journal at least two months before the meeting period. The Executive Council or the President, in their judgment, may call a special meeting of the House of Delegates at any time. The election of the Nominating Committee shall take place at the first session of the House of Delegates.

Section 2. Each and every component medical society that has been chartered by this Society, and is free from indebtedness to this Society and is otherwise in good standing as a component medical society, shall be entitled to one delegate for the first twenty-five voting members or less, and an additional delegate for each additional twenty-five voting members or any additional major fraction of twenty-five voting members. In the case of component societies composed of members from more than one county, each component county shall be entitled to at least one delegate, who shall be a physician residing in that county, except as otherwise hereinafter provided. A list of such delegates shall be officially certified by the secretary of the component county medical society to the Executive Secretary of this Society on forms furnished by the Secretary of this Society, who shall issue official certificate to the delegate. In the event that the regular delegate is unable to attend he shall endorse his certificate in favor of his alternate delegate. If neither the delegate nor the alternate delegate is able to attend the meeting of the House of Delegates, the delegate may designate some other member of his hyphenated society to attend the session of the House of Delegates. Every delegate shall be a voting member of the society or hyphenated society which he represents. In the event no resident physician of a county which is a part of a hyphenated society is able to attend the meeting of the House of Delegates, the member previously designated by the hyphenated society as a delegate from that county shall endorse his credentials as delegate over to and shall designate any other member of such hyphenated society irrespective of his residence.

Section 3. A majority of the registered delegates shall constitute a quorum at any meeting of the House of Delegates, and all of the meetings of the House of Delegates shall be open to members of the Society as are provided for in Article IV of the Constitution.

Section 4. The House of Delegates through its officers, the Executive Council and otherwise, shall give diligent attention to and foster the scientific work and spirit of the Society, and shall constantly study and strive to make each annual session a steppingstone to future ones of higher interest.

Section 5. It shall consider and advise the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

Section 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing a Society in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality.

Section 7. It shall encourage post-graduate work in medical centers, as well as home study and research, and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies, and in this Society.

Section 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body, in such a manner that not more than one-half of the delegates shall be elected in any one year.

Section 9. It shall, upon application, provide and issue charters to county societies and district societies to organize to conform to the letter and spirit of the Constitution and By-Laws of this Society.

Section 10. In sparsely settled sections, it shall have authority to organize the physicians of two or more counties into societies, to be designated by hyphenating the names of two or more counties, so as to distinguish them from districts and other classes of societies; and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies until such counties may be organized separately. Upon written request of two-thirds of the physicians residing in one of the counties which is a part of a hyphenated county society for permission to withdraw from such hyphenated county society and to organize their own county society, the Executive Council may permit and authorize the formation of a new society. Such petition shall be presented to the Executive Council by the Councilor of the District including such county. Such a request may be refused in the discretion of the Executive Council.

Section 11. The House of Delegates shall have authority, through its Executive Council, by majority vote of the Council, a quorum being present, to elect any physician who applies directly to said Council for membership as provided in Section 4 of Article IV of the Constitution where such physician has been definitely refused admission to a local society and he has appealed to the Executive Council for membership and where after hearing the Executive Council is convinced that such physician has been unjustly refused membership in the local society and that it is impossible to reconcile the local society to admitting him, the Executive Council shall certify the election of such physician to the Secretary. A member so elected shall on payment of annual dues and assessments for the current year be entitled to the rights and privileges of membership as provided by Article IV of the Constitution.

Section 12. It shall have authority through or by its Executive Council to discipline, suspend or expel any members of this Society for good cause and particularly for conduct or reasons set forth in Article IV, Section 9, of the Constitution of the Society, or upon recommendation of disciplinary action, suspension or expulsion made to the Executive Council by the Grievance Committee of the Society after investigation and hearing.

Section 13. It may divide the counties of the state into ten councilor districts, and, when the

best interest of the Society and profession will be promoted thereby, organize in each a district medical society; and members of the chartered county societies, and none others, shall be members in such district societies. Any county society wishing to transfer from one district to another may do so by securing a written petition signed by two-thirds of the members of the society in that county, and upon the presentation of this petition by the councilor of that district to the Executive Council, the said councilor shall be authorized to grant or refuse the request.

Section 14. The House of Delegates shall elect Society members to the North Carolina Medical Care Commission, elective members of the Board of Directors of the Hospital Saving Association, and the members of such other Commissions or Boards on which the Society may have representation, by nominations from the floor.

Section 15. It shall have authority to appoint committees for special purposes from among Members of the Society and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 16. It shall present a summary of its proceedings to the last general session of each annual meeting, and the same shall be published in the official publication of the Society.

Section 17. There shall be made to the House of Delegates an annual report of the financial condition and of the management of the North Carolina Medical Journal. This report does not relieve the management of the Journal of its responsibility to the Executive Council of the Society in its advisory capacity.

On motion, duly made and seconded, Chapter IV was adopted.
(Final action).

Chapter V—Election of Officers

Section 1. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect; Provided, that when only one person is nominated for an office, vote may be taken viva voce.

Section 2. The House of Delegates, at its first session, shall select a Committee on Nominations, consisting of ten delegates, no two of whom shall be from the same councilor district. No member of this committee at the time of his election shall hold any elective office in the Society, and it shall nominate for office no member of its committee for any office in the Society not including the Board of Medical Examiners. No member of the Nominating Committee shall be eligible to succeed himself but once, thereby limiting his eligible election to two consecutive terms. He may, however, be elected again to said Committee after a lapse of one year out of office on the Committee. As soon as is practicable the nominating committee shall be called together by the Secretary of the Society, its duties outlined, and a Chairman elected by the committee members. It shall make its report at least two weeks before the annual meeting, to the President of the Society in a sealed confidential letter, this report to remain unopened until presented and read by the President to the House of Delegates at the time designated for report of the Nominating Committee to the House of Delegates at the next annual meeting of the Society. In case of vacancies occurring in this Committee, or of the discovery that any member is ineligible, the Executive Council shall have the power to fill such vacancies. It shall be the duty of this committee to consult with the members of the Society and to hold one or more meetings, at which the best interests of the Society and of the profession of

the State shall be carefully considered, and make its report to the next annual meeting of the Society. The Committee shall make at least one nomination for each of the offices provided for in Article VIII, Section 1 of the Constitution and for members of the State Board of Health as provided in Article IX, Section 12.

Section 3. The report of the Nominating Committee and the election of officers shall take place at the first meeting of the House of Delegates of the annual session.

Section 4. Nothing in this article shall be construed to prevent additional nominations being made by members from the floor of the House of Delegates.

Section 5. Any person known to have solicited votes for or sought any office within the gift of this Society shall be ineligible for any office for two years.

On motion, duly made and seconded, Chapter V was adopted.

(Final action 1957.)

Chapter VI—Duties of Officers

Section 1. The President of the Society shall act as President of the Executive Council and shall preside at all general sessions of the Society; shall appoint all committees not otherwise provided for; shall deliver an annual address at such time as may be arranged; shall give a deciding vote in case of a tie, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and, as far as practicable, shall visit by appointment the various sections of the State and assist the councilors in building up the county societies, and in making their work more practical and useful.

Section 2. The President-Elect shall assist the President in the performance of his duties as may be requested by him and shall otherwise prepare himself for assuming the duties of President. The President-Elect shall be an ex-officio member of the Executive Council. In case the office of President-Elect should become vacant, The House of Delegates at its next regular meeting shall fill the vacancy.

Section 3. Vice Presidents. The Vice Presidents shall be ex-officio members of the Executive Council. They shall assist the President as he may request and shall preside in his stead during his absence or upon his request. Upon the death or the removal of the President, the first Vice-President shall assume the office of President. In case of the death or removal of the first Vice-President, the second Vice-President shall assume the office of President.

Section 4. The Secretary-Treasurer shall be the custodian of all monies, funds, securities, and deeds of the Society. He shall demand and receive all funds due the Society, and shall receive all bequests and donations. He shall have the care and management of the fiscal affairs of the Society, but he shall not be responsible for such funds as the Executive Council shall authorize to be expended by the Executive Secretary for the operation of the Executive Office. He shall give bond for the trust reposed in him in such amount as shall be fixed by the House of Delegates. He shall render an accounting of his activities and the funds or securities in his hands to the House of Delegates annually and at such other times as requested by the House of Delegates. He shall charge upon his books the assessments against each component county society at the end of the fiscal year, shall

collect and make proper credits for the same, and shall perform such other duties as may be assigned to him by the House of Delegates. He shall attend all meetings of the Society, of the House of Delegates, and of the Executive Council and shall act as Secretary of such meetings. He shall be custodian of all records, books and papers belonging to the Society. In so far as is in his power he shall give his best efforts and the influence of his office to aid the councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of the Society. He shall act as chairman of the committee on Scientific Work. He may employ such assistance as may be authorized by the Executive Council or the House of Delegates, and any of the duties of his office as herein specified may be assigned by the Executive Council or the Secretary-Treasurer to the Executive Secretary.

In order that the Secretary-Treasurer may be enabled to give that amount of time to his duties which will permit him to become proficient, it is desirable that he should receive some compensation, the amount of which shall be fixed by the House of Delegates, upon recommendation of the Finance Committee.

Section 5. Executive Secretary. The Executive Secretary shall perform the duties usual to such an office and to the office of Secretary, as may be assigned to him by the Executive Council or the Secretary-Treasurer, subject to the approval of the House of Delegates. He shall be elected by the Executive Council, subject to the approval of the House of Delegates, for a period or term of three years, or for such other period of time as determined by the Executive Council, with salary or compensation as fixed by the Executive Council. Subject to the Executive Council and the House of Delegates, he shall act as General Administrative officer and business manager of the Society. He shall also serve as business manager of the Journal. He shall employ, supervise, and dismiss such executive, administrative and clerical assistants as he deems best to accomplish the efficient conduct of his office, within such budget and salary scales as the Executive Council and the House of Delegates may approve. His salary and the salary of his assistants shall be fixed by the Executive Council. He shall be under the direct jurisdiction and supervision of the Executive Council.

He may be authorized by the Executive Council to handle and expend such sums as may be necessary for the operation of the Executive Office, for which sums he shall give bond in such amount as fixed by the Executive Council.

He shall maintain an office to be known as the Executive Office of the Society at such place and with such staff and facilities as the Executive Council may approve and direct.

He shall also be designated and elected as Assistant Secretary of the Society with full power to act as Secretary in the absence of the constitutional secretary, to affix his signature and the official seal of the Society to documents or papers requiring the signature of such an officer, as directed by the Executive Council.

He shall aid the councilors in the organization and improvement of the component societies and in the extension of the influence and usefulness of this Society.

Subject to the approval of the Executive Council, the Executive Secretary may employ an assistant executive secretary and director of public relations, and a health education consultant for such period of time and for such compensation and with such duties as shall be recommended by the

Committee on Public Relations and the Committee on Rural Health respectively, and approved by the Executive Council.

Section 6. Speaker and Vice-Speaker of the House of Delegates. The Speaker of the House of Delegates shall preside over all meetings of the House of Delegates. As presiding officer of the House of Delegates he shall have the power to appoint such committees of reference as may be necessary for the orderly and proper conduct of the business of the House of Delegates, and shall perform such other duties as custom and parliamentary usage requires.

The Vice-Speaker shall officiate for the Speaker in the latter's absence or at his request. In case of death, resignation or removal of the Speaker, the Vice-Speaker shall succeed to the speakership for the unexpired term.

The Speaker and Vice-Speaker shall be elected annually for one-year terms.

On motion, duly made and seconded, Chapter VI was adopted.

(Final action.)

Chapter VII—Councilor Districts

Section 1. To facilitate the organization of the medical profession, the State of North Carolina is hereby divided by counties into ten councilor districts as follows:

First District—Bertie, Chowan-Perquimans, Gates, Hertford and Pasquotank-Camden-Currituck-Dare.

Second District—Beaufort, Carteret, Craven, Hyde, Jones, Lenoir, Martin-Washington-Tyrrell, Pamlico and Pitt.

Third District—Bladen, Brunswick, Columbus, Duplin, New Hanover, Onslow, Pender, and Sampson.

Fourth District—Edgecombe-Nash, Greene, Halifax, Johnston, Northampton, Warren, Wayne and Wilson.

Fifth District—Chatham, Cumberland, Harnett, Hoke, Lee, Moore, Richmond, Robeson and Scotland.

Sixth District—Alamance-Caswell, Durham-Orange, Franklin, Granville, Person, Vance and Wake.

Seventh District—Anson, Cabarrus, Cleveland, Gaston, Lincoln, Mecklenburg, Montgomery, Rutherford, Stanly and Union.

Eighth District—Ashe, Forsyth-Stokes, Guilford, Randolph, Rockingham, Surry-Yadkin, Watauga, and Wilkes-Alleghany.

Ninth District—Avery, Burke, Caldwell, Catawba, Davidson, Iredell-Alexander, and Rowan-Davie.

Tenth District—Buncombe, Cherokee, Haywood, Henderson, Jackson, McDowell, Macon-Clay, Madison, Mitchell-Yancey, Polk, Swain-Graham and Transylvania.

Upon motion, duly made and seconded, Chapter VII was adopted.

(Final action.)

Chapter VIII—Councilors

Section 1. Each councilor shall be organizer, peacemaker, and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his doings and of the condition of the profession in each county in his district to the annual meeting of the House of Delegates and more often if he has knowledge of anything in any county society in

his district about which the President or the Secretary ought to be informed. Reimbursement to councilors for expenses incurred by them in the performance of their duties within their districts shall be allowed as directed by the Executive Council.

On motion, duly made and seconded, Chapter VIII was adopted.
(Final action).

Chapter IX—The Executive Council

Section 1. The President, President-Elect, Vice-Presidents, Secretary-Treasurer, the immediate Past-President, the Speaker and Vice-Speaker of the House of Delegates, and the ten Councilors shall constitute the Executive Council, of which the President of this Society shall be president and the Secretary-Treasurer shall be Secretary. (1) The Chairman of the Legislative Committee for the current year, (2) The Chairman of the Constitution and By-Laws Committee for the current year, (3) The Editor of the North Carolina Medical Journal, (4) The Secretary of the Board of Medical Examiners, and (5) The State Health Officer shall be ex-officio non-voting members of the Executive Council. The Executive Council shall meet upon the call of the President, or upon the call of four other members of the Council.

Section 2. The Executive Council through its President and Secretary, or through other members or committees appointed by the President, shall represent the Society in its contact and co-operation with other organizations and agencies in this state to the end that such organizations may have the viewpoint of the Society and such help and assistance as this Society might be able to render.

Section 3. The Executive Council shall have supreme charge of all questions of ethics and discipline of members and shall be the board of censors of this Society. As such it shall receive, hear, decide finally for the Society all appeals from the decisions of component societies. It shall have and exercise original jurisdiction over and decide finally for this Society all questions of ethics, discipline, suspension of membership, or right to membership submitted to it by the Grievance Committee, the House of Delegates, or by a component society, or by the Committee on Constitution and By-Laws, or submitted to the Council in any other way. It shall have and exercise original jurisdiction over and decide finally for this Society all controversies between component societies and all controversies between members of different component societies. All questions of an ethical nature brought before the House of Delegates or the General Session shall be referred to the Executive Council without debate. The Executive Council shall interpret the Constitution and By-Laws of the Society in all cases of misunderstanding or dispute.

The Executive Council shall have power to establish and to prescribe rules of procedure to govern all cases within its jurisdiction, including the admission of evidence, the taking of testimony by a Committee from its membership or by other representative, the holding of hearings, and for determining all matters coming before it. The decision of the Executive Council shall be final in all judicial matters, including all questions regarding membership in this Society; provided that matters over which The Judicial Council of the American Medical Association has jurisdiction may be submitted to it for adjudication, but only as an appeal from the decision of the Executive Council of this Society.

Section 4. The Executive Council, ad interim, shall have the right to communicate the views of the Society and the profession on health, sanitation, legislation and on any other subject of interest to the people or the profession and it shall have the right to speak for the Society in matters regarding the conduct of affairs of the Society and its relation to the public generally, provided that such subject has not previously been acted upon by the Society. All actions of the Executive Council shall be subject to review by the House of Delegates.

Section 5. The Executive Council shall make a full report of its doings to the annual meeting of the House of Delegates.

Upon motion, duly made and seconded, Chapter IX was adopted.
(Final action).

Chapter X—Committees

Section 1. The standing committees shall be as follows:

- A Committee on Scientific Work.
- A Committee on Legislation.
- A Committee on Nominations.
- A Committee on Finance.
- A Committee on Necrology.
- A Committee on Arrangements.
- A Committee on Constitution and By-Laws.
- A Reference Committee on Credentials of Delegates to the House of Delegates of the State Society.
- A Committee on Grievances.
- A Reference Committee on Resolutions.
- A Reference Committee on Reports of Officers and Committees.
- A Hospital and Professional Relations Committee.
- A Committee on Public Relations.
- A Committee on Maternal Welfare.

In addition to the foregoing standing committees, such other committees as may be necessary may be appointed by the President.

Section 2. The Committee on Scientific Work shall consist of three members, of which the Secretary shall be one and chairman, and it shall determine the character and scope of the scientific proceedings of the Society for each session, subject to the instructions of the House of Delegates or the Executive Council, or to the provisions of the Constitution and By-Laws. Thirty days previous to the annual meeting it shall prepare and issue a program announcing the order in which papers, discussion and other business shall be presented, which shall be adhered to by the Society as nearly as practicable.

Section 3. The Committee on Legislation shall consist of three members and the President and Secretary-Treasurer. This Committee under the direction of the House of Delegates or the Executive Council shall represent the Society in expressions of viewpoint of the Society concerning legislation in the interest of public health and of the science of medicine.

Section 4. The Committee on Nominations shall be appointed and perform its duties in accordance with the provisions of Chapter 5, Section 2, of these By-Laws. They shall also nominate Delegates to the American Medical Association, and to such other bodies as the Executive Council may determine. They shall also each third year nominate a Board of ten councilors and a Secretary-Treasurer.

Section 5. The Committee on Finance, to consist of three members, shall authorize an annual audit of the receipts and disbursements of the

Society and shall embody the same in its report to the House of Delegates. This Committee shall also prepare a budget allocating specific amounts for the several purposes of the Society as a guide to the Secretary-Treasurer in the disbursements of the Society and shall submit it for approval or disapproval to the House of Delegates, or in cases of emergency, to the Executive Council. In the event that the total allocation exceeds the expected income of the Society, the Committee shall make recommendations for an increase in the assessments for the coming year. It may also make recommendations concerning the remuneration of the officers and such other suggestions concerning the finances of the Society as it may deem proper.

Section 6. The Committee on Necrology to consist of three members, shall report to the Society at its annual memorial service the names of all members of the profession who died during the past year, with other data appropriate for memorial and for publication. The names of such deceased members shall be published in the annual roster of the Society.

Section 7. The Committee on Arrangements shall consist of three members appointed by the President of the Society each year. It shall arrange for suitable accommodations for the meeting places of the Society and of the House of Delegates and of the respective committees and shall have general charge of all arrangements of facilities for the holding of the annual meeting.

Section 8. A reference committee on credentials of delegates to the House of Delegates shall consist of three members appointed by the President who shall consider and pass upon credentials and right of delegate to be seated in the House of Delegates.

Section 9. A Committee on Grievances to consist of the five most recent available past Presidents of the Society with such additions as the Executive Council may determine advisable, shall be appointed by the President. The oldest member in point of service as President shall serve as chairman of the Committee and a Vice-Chairman and Secretary shall be elected from its members.

a. The Committee shall have power to formulate rules to govern matters within its jurisdiction. After approval by the Executive Council, such rules shall be published in the North Carolina Medical Journal, and shall be binding upon all members within ten days after publication.

b. The current edition of the "Principles of Medical Ethics of the American Medical Association," as interpreted by the Executive Council of the State Medical Society, shall be the final standard by which all professional conduct is determined.

c. The Committee on Grievances shall supervise the ethical deportment of the membership of the Society, shall make periodic recommendations for the improvement of professional conduct, and shall receive and investigate complaints against any physician that may be preferred in writing and signed by any person, lay or professional. It may at any time advise any member of the Society on any matter pertaining to professional conduct.

d. The Committee will receive evidence and pass its own judgment upon it, and will, if possible, endeavor to settle complaints amicably, but it will not assume authority to discipline any physician. It shall file charges against any physician deemed by the Committee guilty of unethical conduct.

These charges may, in the discretion of the Committee, be filed direct with the Executive Council of the State Society.

e. No member of the Committee on Grievances may participate in the deliberation of questions concerning the conduct of a physician living in the jurisdiction of that member's county. The vice chairman shall preside in all cases involving a member of the chairman's county, and shall act as secretary in all cases involving the secretary's county. Any member against whom an accusation is made will be informed that the member of the Committee living in his county will not be present during the hearing of his case. If the accused physician is willing, however, the acting chairman, in order to expedite proceedings, may instruct the Committee member living nearest the accused to undertake preliminary investigation, obtain information, and report to the Committee.

f. The Committee on Grievances shall have the authority to summon members of the Society to appear before it, either in answer to complaints or as witnesses in cases involving other members. Any member failing to respond to such summons may be cited before the Executive Council for contempt proceedings.

g. Unless in a given case the Committee determines that verbatim testimony should be taken, no person other than Committee members and any witness then being heard shall be admitted to any part of its proceedings when a complaint is being considered. Should the Committee deem it necessary to take verbatim testimony, it may employ a competent shorthand reporter who shall be sworn to secrecy. No regular employee of the Society may be permitted to take notes or minutes in such matters.

h. The Committee shall keep all complaints in professional confidence. Any complainant unwilling to appear personally before the Committee, however, may be told that such unwillingness handicaps the Committee in its investigation. Every complainant invited to appear before the Committee shall be assured that his appearance and the origin of his complaint will be kept confidential; provided, however, that should any form of prosecution result, the Committee must of necessity reveal the names of essential witnesses, even though the name of the complainant is included.

i. The Secretary of the Committee shall acknowledge receipt of all complaints in writing. In consultation with the chairman, he shall arrange for meetings of the Committee as often as necessary, and shall notify all persons concerned of meeting places and dates. He shall keep the chairman informed as to the progress of investigations conducted between meetings of the Committee.

j. When the chairman is informed by the secretary of a new complaint, he shall decide whether it should be investigated by the whole Committee or by one or more individual members. In most cases he may designate one or two members to undertake a preliminary informal investigation.

k. When such an informal investigation has convinced the chairman and at least one other member of the Committee that no disciplinary action is indicated and both the complainant and the physician involved agree to accept the advice of the appointed group, their advice and suggestions should be reduced to writing, and copies, signed by the acting chairman, shall be furnished both the complainant and the physician concerned.

l. When such an informal investigation convinces any disinterested member of the Committee that disciplinary action is indicated, the entire Committee, except the member whose county is involved, shall meet to consider the matter for-

mally, and further action shall be determined by the majority vote of those present.

m. When, after investigation and attempts to effect amicable settlement, the Committee is unable to reconcile differences over fees charged by a member of the Society, the Committee shall by a majority vote determine the fee which it deems fair and proper. If the Society member shall agree to the amount so fixed and fail to abide by his agreement, the Committee shall cite him before the Executive Council for contempt proceedings. Failure of the member to agree to the fixed fee by the Committee shall constitute grounds for preferring charges of unprofessional conduct.

n. When the Committee determines to file charges against a member of the Society with the Executive Council, the charges shall be reduced to writing and filed over the handwritten signatures of all other members of the Committee who have taken part in the proceedings. If it is determined that disciplinary charges should be filed against a physician who is not a member of the State Society, but that the evidence does not justify proceedings before the State Board of Medical Examiners, the Committee shall reduce its findings to writing and, subject to advice of legal counsel, shall notify the physician concerned of its findings. A copy of the notice shall be filed with the executive office of the State Society.

o. Both the original complainant and the accused physician shall be furnished with a written statement of the final decision of the Committee as soon as possible after the completion of an investigation, whether (1) the Committee considers the case closed or (2) decides to file charges with a judicial body.

p. Immediately after each meeting of the whole Committee, its officers shall prepare and deliver to the executive office of the State Medical Society a brief memorandum, suitable for publication in the North Carolina Medical Journal, concerning any non-secret action taken or general conclusions reached concerning ethical deportment within the Society.

q. Officers of the Committee shall keep appropriate and sufficient records of all its final actions, other than confidential matters, and shall make an annual report and recommendations to the House of Delegates of the State Society.

r. The expenses of the Committee on Grievances shall be provided for by the Executive Council. Its members shall be reimbursed for traveling and living expenses incurred in fulfilling their duties as members of the Committee.

s. The Committee shall hold meetings as often as necessary, and at a place most convenient for the members.

t. The establishment of the Committee on Grievances shall be given full publicity, so that the people of the State may be made aware of its existence and of its functions.

u. It is requested that each component Society establish a Grievance Committee within the component society for the purpose of supervising the ethical deportment of the membership of the component society, making periodic recommendations for the improvement of professional conduct, and receiving and investigating complaints against any physician that may be referred in writing and signed by any person, lay or professional, or which may be referred to it by the Grievance Committee of the State Society and of considering and giving advice to the Society or any member pertaining to professional conduct, and also for the purpose of con-

ducting investigations upon its own motion of any matter involving the deportment or conduct of one of its members which should come to its attention in any form.

v. The Grievance Committee of the State Society shall be authorized and empowered, in addition to the foregoing, to investigate on its own motion any matter involving the conduct or deportment of a member of the Society whenever any information justifying such investigation should come to its attention. The Committee of the State Society is also empowered and authorized to refer any matter pertaining to the deportment or conduct of a member of the Society to the Grievance Committee of the component society of which such member is a member, whenever in the judgment of the committee such referral is desirable and where such component society has set up a Grievance Committee empowered to perform the functions herein outlined. The Grievance Committee of the State Society shall consider in an appellate capacity any question or matter considered and passed upon by a Grievance Committee of a component society, either upon appeal by a member of the Society or by a complainant or other person who may be involved in the matter, or the Committee may conduct further investigation of its own motion of any such matter.

w. The statements or actions of members of the Executive Council, of members of The Grievance Committee, or of the officers or representatives of the Society in the performance of their official duties for the Society shall be considered privileged communications, and neither such persons, nor the Society or its officers shall be liable to any member, or former member for such statements or actions made, taken or participated in by them in the performance of such duties. All statements made to, or testimony given by, any person before the Grievance Committee or the Executive Council of the Society shall likewise be considered privileged communications and shall not render such person or witness liable to any member of the Society. Acceptance or continuance of membership in the Society shall constitute assent to this and other provisions of the Constitution and By-Laws of this Society.

Section 10. A reference committee on resolutions to consist of three members appointed by the Speaker of the House of Delegates shall study each resolution presented for action by the House of Delegates before it is submitted to a vote by the delegates and shall make recommendations as to its approval, disapproval, or modification. All resolutions considered by the House of Delegates shall be introduced during the first meeting of the House and referred to the Resolutions Committee.

Section 11. A Reference Committee on reports of officers and committees, consisting of three members appointed by the Speaker of the House of Delegates, shall study reports of officers and the committees and make recommendations concerning same to the House of Delegates.

Section 12. A Committee on Public Relations consisting of not less than three nor more than five members, as determined by the Executive Council, shall determine the character and scope of Public Relations activities of the Society, and shall report its recommendations and activities for the approval of the Executive Council at least once annually. The tenure of office of each member shall be staggered so as to provide for the termination of the tenure of at least one member each year.

Section 13. A Committee on Maternal Welfare

to consist of nine members shall be appointed by the President of the State Society for a period of six years, which membership shall include the director of the Maternal Health Division of the State Board of Health. The tenure of office of each member shall be staggered so as to provide for the termination of term of one member each year. It shall be the duty of the Committee to promote the highest standards of obstetric care for the State of North Carolina; to educate the people of the state to seek adequate maternal care; to prepare and provide for the physicians of the state an educational and consultative maternal care program insofar as possible; to conduct a survey of maternal deaths in the state in an effort to determine the needed facilities to reduce the current maternal death rate; to employ such procedures as deemed necessary to further the progress of obstetrical care and; to continue investigation of existing problems as shown by the mortality survey.

Section 14. A Committee on Hospital and Professional Relations consisting of ten members shall be appointed by the President, one from each councilor district of the Society. It shall be the duty of the committee to consider all matters involved in the relationship of physicians to hospitals, to hear and investigate complaints of a hospital professional staff, individually or collectively, against a hospital, or of a hospital against any member of a hospital staff, and to attempt to bring about an amicable settlement of such complaints or differences, to receive, hear and investigate complaints with reference to professional relations between physicians and hospitals.

Section 15. A Committee on Constitution and By-Laws consisting of five members appointed by the President shall have the duty of considering all proposals to amend the Constitution or By-Laws. Before any proposal to amend the Constitution or By-Laws shall be finally passed upon or adopted, it shall first be referred to and considered by this Committee and the committee's recommendation with reference to such proposal shall be received at the meeting of the House of Delegates at which the proposal is considered.

Section 16. All of the foregoing Committees, except the Committee on Nominations, shall be appointed by the President of the Society.

Upon motion, duly made and seconded, Chapter X was adopted.
(Final action).

Chapter XI—Sections

Section 1. The following Sections shall constitute the regular scientific program: Surgery, Internal Medicine, Gynecology and Obstetrics, Public Health and Education, Pediatrics, Ophthalmology and Otolaryngology, General Practice of Medicine, Neurology and Psychiatry, Radiology, Pathology, Anesthesiology, and such other sections as recommended by the Executive Council and approved by the House of Delegates. During the meeting of each session a chairman and a secretary for the following year shall be elected either in open session or through a committee appointed for the purpose by the chairman of the section.

Section 2. The chairmen of sections shall send in to the Secretary-Treasurer, not later than ninety days previous to each meeting of the Society, the titles of papers to be presented by themselves and their assistants, to be used by the Committee on Scientific Work in making a program for the meeting.

Section 3. No paper shall be read before the Society unless the author is present, unless his absence be due to some unavoidable circumstance.

Section 4. No paper shall be received by or read before this Society that has been presented to any other society excepting only a component society or District Society of this State, or that has been offered for publication in any journal. In the case of any paper accepted, the author shall invest with the Society all rights to its ownership. Any paper that is read before the Society or a section of the Society shall be considered the property of the Society, except the editor of the Journal shall be authorized to waive such ownership on behalf of the Society in his discretion.

Only those papers presented before this Society, which are submitted in writing, will be eligible for awards or considered for publication in the North Carolina Medical Journal. The speaker may arrange with the Editor of the North Carolina Medical Journal for submission of such papers for publication in other Journals.

Section 5. It is to be understood that the Society is not to be considered as endorsing all of the views and opinions advanced by the authors of papers published in the official publication of the Society.

On motion, duly made and seconded, Chapter XI was adopted.

(Final action).

Chapter XII—Assessments and Expenditures

Section 1. An assessment in an amount determined by the Executive Council and approved by the House of Delegates per capita according to and upon the membership of the component societies is hereby made the annual dues of the Society, provided the Executive Council does not lower the same for the next succeeding year on or before October 15 of the current year. The fiscal year of the Society shall be the calendar year. The amount of the annual assessment shall be collected by the secretary of each county society from each of its members on or before the first day of February and forwarded to the Secretary-Treasurer of the State Society before the first day of March of each year. The Secretary of each county society shall forward a statement of its assessment together with its roster of all officers and members, a list of delegates, a list of non-affiliated physicians of the county to the Secretary-Treasurer before the 1st day of March of each year. Any new member, other than by transfer from another State Association, who joins the Society after July will pay one-half dues levied for that year.

Section 2. Any county society which fails to pay its assessment, or make the reports required, on or before the date above stated, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the State Society or of the House of Delegates, or receive the North Carolina Medical Journal until such requirements have been met. However, when a component society is not functioning, any physician in good standing of such county may send his yearly dues to the Secretary-Treasurer of the Medical Society of the State of North Carolina direct, and in this way keep himself in good standing in the state and national organizations.

Section 3. All motions or resolutions appropriating money shall specify a definite amount, or so much thereof, as may be necessary for the purpose indicated and must be approved by the House of Delegates, or by the Executive Council.

On motion, duly made and seconded, Chapter XII was adopted.

(Final action).

program of the State Society which is given in detail here. Then the President appointed Dr. George Paschal as the permanent Chairman of the Professional Liability Insurance Committee, and he wants to make a short supplementary statement.

Dr. Paschal: Mr. Speaker, Ladies and Gentlemen: We have had the pleasure of having Dr. Murphy as Chairman of this Committee to represent our group and proceed with the work on this Committee's problems over the past year. It represents a great volume of work, a program which is well outlined in your compilation of the Committee reports. It has been alluded to by President Rousseau in his report this afternoon, and it is something that we can put our finger on at this time to meet the demand for professional liability insurance throughout the membership of this Society.

I will not try to tell you at this time of the advantages of this program. I will ask you and urge you to request all of the members of your component societies to review this program as outlined in the compilation of the committee reports. I will ask you to consider it thoroughly. If it is your wish that this be adopted here tonight, it will be implemented and put into effect, and soon, not through the offices of this Society but through the representatives of the insurance company which is writing this insurance. The membership of the Society will be called upon and the program will be explained to them and they will be given an opportunity to secure this insurance at a rate which we think will eventually be very favorable to the entire membership.

Speaker Murphy: Gentlemen, from my standpoint, our Committee was convinced that this is the best possible solution. You will see there that it has been in effect in some five or six states, the state having the longest experience being Oklahoma where it has been in effect for five or six years. In Oklahoma, under this program, the rate has been reduced nearly 50 per cent. We would hope that would happen in North Carolina.

This program was recommended by the Committee to the Executive Council. It was adopted by the Executive Council. It is recommended to you for adoption. If you are ready, the Chair will entertain a motion that it be adopted, and, understand, if it is adopted here now, it becomes the official professional liability program of the Medical Society of North Carolina, and the representative of the St. Paul-Mercury Company will call on you as soon as possible. There are some 200 representatives in the State, and they will receive the information, and they will go out to serve you as individuals.

Dr. Raiford: I move its adoption.

[The motion was seconded by Dr. Strosnider.]

[The motion was put to a vote and carried.]

Speaker Murphy: May I say that the number of lawsuits and the size of the verdicts have increased at an alarming rate over the country and in the State of North Carolina, and when these representatives come to call on you they will be representing the Company and the Medical Society of North Carolina, but it is not based on any per cent of participation. In other words, it will be written and will not require any certain percentage of the membership. But the effectiveness of it in protection and in reducing the rate of course will increase with the per cent of participation.

We have taken up a number of these reports and we continue.

I see now our President has come in and we will go back for the Report of the Executive Council given by Dr. Rousseau.

President Rousseau: Mr. Speaker and Members of the House of Delegates and Guests: We have here the complete report of all of the Executive Council meetings, which includes all of the business of the Medical Society since last May, except that transacted tonight. In includes the Budget Report, the Finance Report, and if it is your pleasure I will be glad to read them. We had meetings of the Executive Council in September, 1955. We had a meeting of the Executive Council in January, 1956, and a meeting of the Executive Council yesterday, April 29. All of this will be published, all of the activities of the Executive Council will be published in the Journal. If you would like to ask any questions or if you would like me to read the activities of the Executive Council, I would be glad to do so. What is your pleasure?

REPORT OF THE EXECUTIVE COUNCIL TO THE HOUSE OF DELEGATES

As of April 30, 1956

The Executive Council met in Raleigh at 10:00 o'clock a.m. September 25, 1955 and was presided over by president James P. Rousseau, of Winston-Salem. All of the officers of the Society, eight of the ten Councilors, and the past-president answered the roll call and a quorum was declared present.

Minutes of the previous meeting were tendered and approved on motion made, duly seconded and carried.

The Committee on Public Relations made an informal report of its decision to seek the opportunity of offering eight curricular hours of instructional work annually through the three schools of medicine . . . Duke, Bowman Gray and the State University, as well as to direct and emphasize its public relations conferences to the students of the three schools as a means of introducing and inculcating more of the humanities, sociological aspects of practice, practical aspects of medicine and the economic ends and responsibilities of medicine to the student physician in order to substantiate and improve the public relations qualifications and attitudes of future physicians in lieu of endeavoring to reach men now in practice who failed to gain some of these aspects now recognized as essential in the practice of medicine and in the public relations of physicians. The Committee specifically recommended raises in the salary of Mr. William Hilliard, Executive Assistant for Public Relations and Mrs. Annette Boutwell, Health Education Consultant for Rural Health. On motion made, duly seconded and carried, the report was accepted.

On motion of Dr. Lenox Baker, seconded by Dr. Zack Owens, and carried, the Committee on Public Relations was authorized to present a resolution to the Deans of the three Schools of Medicine conveying the approval of the Executive Council of the program of the Public Relations Committee and requesting the cooperation of the Deans and the schools in the proposed program.

The Committee on Postgraduate Medical Study reported upon two program objectives: one, the invitation to two out-of-state physicians to each of the teaching institutions to perform ward-round teaching and conference programs at the schools while two house-officers will be offered to go out-of-state to cover for the invited and; two, the republication in revised form of the directory

on postgraduate programs and opportunities in the state during the succeeding year of 1956 which pamphlet will be distributed to the members of the Society.

The Committee on Rural Health presented an informal discussion of a formal report filed encompassing the essentials of (1) participation in the educational curricula of the Public Relations Committee recommendation of eight hours instruction to medical students to the extent of two hours on the subject of rural health and medical practice, (2) the plan of the Committee to prepare and present two area rural health conferences in addition to the annual state-wide Rural Health Conference and to promote rural health conference at the county level as a pilot demonstration during 1956. On motion made, duly seconded and carried, the report was accepted.

Referring to recommendations in a letter from Dr. V. K. Hart, Chairman of the Committee on Arrangements for a Meeting Place for 1957-58, Dr. Edward Schoenheit reported for the Committee the following recommendations: (1) that the Society try and effect a reconciliation with Pinehurst Incorporated so as to continue to meet at the Carolina Hotel; (2) in the event this not possible then to consider other cities, first on the list of which the Committee recommended Asheville as having the next most adequate facilities and accommodations. On motion of Dr. William Sams, seconded by Dr. T. P. Brinn, and carried the report of the Committee was received.

The Committee on Finance reported and recommended the adoption of the following budget for 1956:

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA BUDGET ESTIMATES

January 1, 1956, to December 31, 1956

RECEIPTS: (Estimated)	\$131,650.00
Balance January 1, 1956	Nil
Assessment 2400 paying members	\$96,000.00
Interest net (estimated on diminished quarters)	200.00
Sales (estimated on 1954)	300.00
Author contributions to cuts	300.00
Revenue unexpected (estimated)	350.00
Technical Exhibits (estimated on 1954)	9,000.00
Journal Advertising (estimates on 1954 and a 15% increase in rates)	25,000.00
**AMA Remittances 1% of dues processed (estimated on 1954)	600.00
EXPENDITURES (estimated)	\$147,450.66
Schedule A	\$39,303.80
Schedule B	35,479.00
Schedule C	12,532.00
Schedule D	3,260.00
Schedule E	36,568.86
Schedule F	15,090.00
Schedule G	5,217.00

EXCESS OF RECEIPTS OVER

EXPENDITURES	Nil
Excess of expenditures over receipts	\$15,800.66
RESERVES (estimated)	\$ 92,849.00
Bonds: (cost value)	\$90,968.00
Increment (Series	
F&J Bonds)	881.00

*Based on dues @ \$40 per member per annum (not inclusive of an anticipated new class of membership under the title of SCIENTIFIC MEMBERS.

**To be appropriated to Secretarial Budget A-6.

Submitted to Committee on Finance Sept 2., 1955

Submitted to Executive Council for

Approval September 25., 1955

Submitted to House of Delegates for

Approval April 30., 1956

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA 1956 Estimated Budget Accounts

A. EXECUTIVE BUDGET	\$ 39,303.80
A-1 President, expense of (travel and communications)	1,800.00
A-2 Secretary-Treasurer, salary of	2,640.00
A-3 Secretary-Treasurer, travel of	1,200.00

A-4 Executive-Secretary, salary of	9,000.00
A-5 Executive-Secretary, travel of*	3,100.00
A-6 Executive Office, clerical assistants**	11,880.00
A-7 Executive Office, equipment for and/or replacements	1,200.00
A-8 Executive Office, expense of (12 months rent, communications, printing and supplies, repairs and replacement of expendables)	6,000.00
A-9 Bonding (to 1957)	Nil
A-10 Audit	300.00
A-11 Taxes (salary tax)	363.00
A-12 Insurance fire, compensation and employer's liability	100.00
A-13 Membership Record System (addition to)	200.00
A-14 Publications, reports and executive aids	160.00
A-15 Insurable: interest insurance	1,370.80

*Basis: Real for personal maintenance and travel and for official purposes

**Any revenue derived from collection efforts related to AMA dues and processing of same shall accrue to this item of budget.

B. JOURNAL BUDGET

B-1 Journal, publication of	27,000.00
B-2 Journal, dues for	500.00
B-3 Editor, salary of	2,310.00
B-4 Assistant Editor, salary of	2,640.00
B-5 Editorial Office, expense of (12 months rent, communications, printing and supplies, repairs and replacements)	400.00
B-6 Journal Business Manager's Office, expense of (12 months communications, printing, supplies, repairs and replacements)	300.00
B-7 Business Manager's Office, equipment for	200.00
B-8 Journal, travel for (local and national)	200.00
B-9 Taxes (salary tax)	99.00
B-10 Refunds, subscriptions, etc.	30.00
B-11 Roster, publication of	1,500.00

C. INTRA-FUNCTIONAL ACTIVITY BUDGET: \$ 12,532.00

C-1 Executive Council, expense of and travel of councilors, including district travel	2,750.00
C-2 Councilors' expense of (communications, printing and supplies)*	1,000.00
C-3 Legislative Committee, expense of (local and national activity)	2,000.00
C-4 Public Relations Committee, expense to National Conference	350.00
C-5 Maternal Welfare Committee, expense of (secretarial, communications, productions, printing and supplies)	1,620.00
C-6 Rural Health Committee, expense of attendance to National Conferences	300.00
C-7 Cancer Committee, expense of	300.00
C-8 Convention Arrangements Committee expense of	300.00
C-9 Scientific Exhibits Committee and Audio-Visual Program expense of	200.00
C-10 Committee on Mental Hygiene	500.00
C-11 Committee on Cancer System	250.00
C-12 Committee on Mediation, expense of travel reporting service and communications	800.00
C-13 Committee in general, expense of	1,500.00
C-14 Committee on Anesthesia Mortality	400.00
C-15 Committee on Occupational Health	262.00

*Includes sums authorized by Chapter VIII, Section 2 of by-Laws.

D. EXTRA FUNCTIONAL ACTIVITIES BUDGET \$ 3,260.00

D-1 Delegates to AMA expense of (2 to each annual and clinical session)	2,160.00
D-2 Conference dues	300.00
D-3 Woman's Auxiliary (cont. to entertainment)	500.00
D-4 Delegates to AMA Regional Conferences	300.00

E. PUBLIC RELATIONS BUDGET* ** \$ 36,568.86

E-1 Assistant for Public Relations, salary for	6,600.00
E-2 Assistant for Public Relations, travel	2,100.00
E-3 Committee Chairman, out of State travel	300.00
E-4 Public Relations, clerical assistance	3,200.00
E-5 Public Relations, equipment for	1,000.00
E-6 Public Relations, expense of (12 months rent, communications, printing and supplies, repairs and replacements)	2,500.00
E-7 Taxes (salary tax)	256.00
E-8 Publications and Executive Aids	200.00
E-9 Audio-visual depiction; photography; radio motion-picture; production, distribution and printing, purchase of films, etc.	800.00
E-10 Educational distributions; reprints, periodicals, press materials, brochures, pamphlets, and dodgers for educational purposes; production, distribution and printing, binding, stuffing and mailing)	700.00
E-11 News and press releases, production and printing	800.00
E-12 Public Relations Bulletin, production and distribution	2,850.00
E-13 School Physicians Conference	262.86
E-14 Exhibits and displays: Purchase, rental, production, fabrication and transportation of	1,400.00
E-15 Public Relations Conference annual	1,000.00
E-16 Physicians Press Conference	600.00

program of the State Society which is given in detail here. Then the President appointed Dr. George Paschal as the permanent Chairman of the Professional Liability Insurance Committee, and he wants to make a short supplementary statement.

Dr. Paschal: Mr. Speaker, Ladies and Gentlemen: We have had the pleasure of having Dr. Murphy as Chairman of this Committee to represent our group and proceed with the work on this Committee's problems over the past year. It represents a great volume of work, a program which is well outlined in your compilation of the Committee reports. It has been alluded to by President Rousseau in his report this afternoon, and it is something that we can put our finger on at this time to meet the demand for professional liability insurance throughout the membership of this Society.

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This program was recommended by the Committee to the Executive Council. It was adopted by the Executive Council. It is recommended to you for adoption. If you are ready, the Chair will entertain a motion that it be adopted, and, understand, if it is adopted here now, it becomes the official professional liability program of the Medical Society of North Carolina, and the representative of the St. Paul-Mercury Company will call on you as soon as possible. There are some 200 representatives in the State, and they will receive the information, and they will go out to serve you as individuals.

Dr. Raiford: I move its adoption.

[The motion was seconded by Dr. Strosnider.]

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REPORT OF THE EXECUTIVE COUNCIL TO THE HOUSE OF DELEGATES

As of April 30, 1956

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Minutes of the previous meeting were tendered and approved on motion made, duly seconded and carried.

The Committee on Public Relations made an informal report of its decision to seek the opportunity of offering eight curricular hours of instructional work annually through the three schools of medicine . . . Duke, Bowman Gray and the State University, as well as to direct and emphasize its public relations conferences to the students of the three schools as a means of introducing and inculcating more of the humanities, sociological aspects of practice, practical aspects of medicine and the economic ends and responsibilities of medicine to the student physician in order to substantiate and improve the public relations qualifications and attitudes of future physicians in lieu of endeavoring to reach men now in practice who failed to gain some of these aspects now recognized as essential in the practice of medicine and in the public relations of physicians. The Committee specifically recommended raises in the salary of Mr. William Hilliard, Executive Assistant for Public Relations and Mrs. Annette Boutwell, Health Education Consultant for Rural Health. On motion made, duly seconded and carried, the report was accepted.

On motion of Dr. Lenox Baker, seconded by Dr. Zack Owens, and carried, the Committee on Public Relations was authorized to present a resolution to the Deans of the three Schools of Medicine conveying the approval of the Executive Council of the program of the Public Relations Committee and requesting the cooperation of the Deans and the schools in the proposed program.

The Committee on Postgraduate Medical Study reported upon two program objectives: one, the invitation to two out-of-state physicians to each of the teaching institutions to perform ward-round teaching and conference programs at the schools while two house-officers will be offered to go out-of-state to cover for the invited and; two, the republication in revised form of the directory

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Referring to recommendations in a letter from Dr. V. K. Hart, Chairman of the Committee on Arrangements for a Meeting Place for 1957-58, Dr. Edward Schoenheit reported for the Committee the following recommendations: (1) that the Society try and effect a reconciliation with Pinehurst Incorporated so as to continue to meet at the Carolina Hotel; (2) in the event this not possible then to consider other cities, first on the list of which the Committee recommended Asheville as having the next most adequate facilities and accommodations. On motion of Dr. William Sams, seconded by Dr. T. P. Brinn, and carried the report of the Committee was received.

The Committee on Finance reported and recommended the adoption of the following budget for 1956:

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA BUDGET ESTIMATES

January 1, 1956, to December 31, 1956

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**AMA Remittances 1% of dues processed (estimated on 1954)	600.00
EXPENDITURES (estimated)	\$147,450.66
Schedule A	\$39,303.80
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Schedule C	12,532.00
Schedule D	3,260.00
Schedule E	36,568.86
Schedule F	15,090.00
Schedule G	5,217.00

EXCESS OF RECEIPTS OVER

EXPENDITURES	Nil
Excess of expenditures over receipts	\$ 15,800.66
RESERVES (estimated)	\$ 92,849.00
Bonds: (cost value)	\$90,968.00
Increment (Series F&J Bonds)	881.00

*Based on dues @ \$40 per member per annum (not inclusive of an anticipated new class of membership under the title of SCIENTIFIC MEMBERS.

**To be appropriated to Secretarial Budget A-6.

Submitted to Committee on Finance Sept 2, 1955

Submitted to Executive Council for

Approval September 25, 1955

Submitted to House of Delegates for

Approval April 30, 1956

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

1956 Estimated Budget Accounts

A. EXECUTIVE BUDGET	\$ 39,303.80
A-1 President, expense of (travel and communications)	1,800.00
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A-3 Secretary-Treasurer, travel of	1,200.00

A-4 Executive-Secretary, salary of	9,000.00
A-5 Executive-Secretary, travel of*	3,100.00
A-6 Executive Office, clerical assistants**	11,880.00
A-7 Executive Office, equipment for and/or replacements	1,200.00
A-8 Executive Office, expense of (12 months rent, communications, printing and supplies, repairs and replacement of expendables)	6,000.00
A-9 Bonding (to 1957)	Nil
A-10 Audit	300.00
A-11 Taxes (salary tax)	363.00
A-12 Insurance fire, compensation and employer's liability	100.00
A-13 Membership Record System (addition to)	200.00
A-14 Publications, reports and executive aids	150.00
A-15 Insurable: interest insurance	1,370.80

*Basis: Real for personal maintenance and travel and for official purposes

**Any revenue derived from collection efforts related to AMA dues and processing of same shall accrue to this item of budget.

B. JOURNAL BUDGET	\$ 35,479.00
B-1 Journal, publication of	27,000.00
B-2 Journal, cuts for	500.00
B-3 Editor, salary of	2,310.00
B-4 Assistant Editor, salary of	2,640.00
B-5 Editorial Office, expense of (12 months rent, communications, printing and supplies, repairs and replacements)	400.00
B-6 Journal Business Manager's Office, expense of (12 months communications, printing, supplies, repairs and replacements)	300.00
B-7 Business Manager's Office, equipment for	200.00
B-8 Journal, travel for (local and national)	200.00
B-9 Taxes (salary tax)	99.00
B-10 Refunds, subscriptions, etc.	30.00
B-11 Roster, publication of	1,800.00

C. INTRA-FUNCTIONAL ACTIVITY BUDGET: \$ 12,532.00

C-1 Executive Council, expense of and travel of councilors, including district travel	2,750.00
C-2 Councilors, expense of (communications, printing and supplies)*	1,000.00
C-3 Legislative Committee, expense of (local and national activity)	2,000.00
C-4 Public Relations Committee, expense to National Conference	350.00
C-5 Maternal Welfare Committee, expense of (secretarial, communications, productions, printing and supplies)	1,620.00
C-6 Rural Health Committee, expense of attendance to National Conferences	300.00
C-7 Cancer Committee, expense of	300.00
C-8 Convention Arrangements Committee expense of	300.00
C-9 Scientific Exhibits Committee and Audio-Visual Program expense of	200.00
C-10 Committee on Mental Hygiene	500.00
C-11 Committee on Coroner System	250.00
C-12 Committee on Mediation, expense of travel reporting service and communications	800.00
C-13 Committee in general, expense of	1,500.00
C-14 Committee on Anesthesia Mortality	400.00
C-15 Committee on Occupational Health	262.00

*Includes sums authorized by Chapter VIII, Section 2 of by-Laws.

D. EXTRA FUNCTIONAL ACTIVITIES BUDGET \$ 3,260.00

D-1 Delegates to AMA expense of (3 to each annual and clinical session)	2,160.00
D-2 Conference dues	200.00
D-3 Woman's Auxiliary (cont. to entertainment)	500.00
D-4 Delegates to AMA Regional Conferences	300.00

E. PUBLIC RELATIONS BUDGET** \$ 36,568.86

E-1 Assistant for Public Relations, salary for	6,600.00
E-2 Assistant for Public Relations, travel	2,100.00
E-3 Committee Chairman, out of State travel	300.00
E-4 Public Relations, clerical assistance	3,200.00
E-5 Public Relations, equipment for	1,000.00
E-6 Public Relations, expense of (12 months rent, communications, printing and supplies, repairs and replacements)	2,500.00
E-7 Taxes (salary tax)	256.00
E-8 Publications and Executive Aids	200.00
E-9 Audio-visual depiction; photography; radio motion-picture; production, distribution and printing, purchase of films, etc.	800.00
E-10 Educational distributions; reprints, periodicals, press materials, brochures, pamphlets, and dodgers for educational purposes; production, distribution and printing, binding, stuffing and mailing)	700.00
E-11 News and press releases, production and printing	800.00
E-12 Public Relations Bulletin, production and distribution	2,850.00
E-13 School Physicians Conference	262.86
E-14 Exhibits and displays: Purchase, rental, production, fabrication and transportation of	1,400.00
E-15 Public Relations Conference annual	1,000.00
E-16 Physicians Press Conference	600.00

E-17 Public and personified activities in the field of Public Relations	800.00
E-18 High School Essay Contest	800.00
E-19 Collateral Public Relations with other committee activity	800.00
E-20 Salary of Health Education Consultant.....	5,500.00
E-21 Travel of Health Education Consultant	1,500.00
E-22 Clerical (part time)	1,200.00
E-23 Rural Health Conference (Plus any donations specifically contributed to program of Rural Health Conference)	400.00
E-24 Expense, (12 months communications, supplies, repairs and replacements)	700.00
*Authorized by action of 1949 House of Delegates with proviso that \$15 of annual dues (estimated to gross \$28,000) be specifically allocated and earmarked for support of public relations program. The division allocations are estimates only and may be changed within the total of the public relations budget.	
**Total diminished by allocation to RH as per policy est. by the Executive Council October 30, 1949.	

F. ANNUAL SESSIONS (102nd) CONVENTION

BUDGET	\$ 15,090.00
F-1 Programs, production of	1,400.00
F-2 Hotel Convention expense	1,700.00
F-3 Publicity promotion, expense of (reporters and expense)	300.00
F-4 Entertainment (general, involving personnel)	500.00
F-5 Orchestra and floor entertainment	2,500.00
F-6 Guest Speakers (3) expense of and or honorarium for	600.00
F-7 Banquet Speaker, fee and expense	Nil
F-8 Electric amplification	200.00
F-9 Booth installations, supplies, expense, signs (scientific and technical) including exhibit expense and promotion	3,500.00
F-10 Projection, expense of (service rentals)	500.00
F-11 Badges (members, guest, exhibitors, auxiliary)	400.00
F-12 Reporting Service for transactions (sessions and sections-11)	2,000.00
F-13 Rental, extra facilities for sections and/or exhibits and revenue derived as results of outside sale space accrues to this budget	800.00
F-14 Exhibitors entertainment (At 5% of Exhibit Income)	690.00
G. MISCELLANEOUS BUDGET:	\$ 5,217.00
G-1 Previous accounts payable	100.00
G-2 Refund (dues, etc.)	250.00
G-3 Legal Council, retainer fees for	2,000.00
G-4 Reporting (executive Council, etc.)	1,200.00
G-5 President's Jewel	100.00
G-6 Token, plaque and certificate, mats & promotion of GP of Year and 50 Yr. Club	150.00
G-7 Fifty Year Club (pins and certificates for 34)	292.00
G-8 Section (11) expense of communications and printing	125.00
G-9 Contingency and emergency	1,000.00

In addition to the budget reported the Committee recommended the following:

I. 1. All committees requiring financial assistance:

- Have the estimated budget in to the Executive Secretary by the first of September.
- Justify any increase over the last year's request.
- Return all unused funds to the General Fund.

II. All Committee disbursements be audited.

That is from every committee. Some of them are now and some are not.

III. That the Finance Committee with the help of the Society's auditing firm and the Secretary-Treasurer, work out a maximum and minimum wage schedule for all the Society's employees.

IV. That this same group work out some form of retirement program for all its employees.

V. That Article IV, Section 6 of the Constitution be changed by deleting the word "thirty" in line 3 and inserting the word "thirty-five" in its place.

VI. Authorize an expenditure of not to exceed 5 percent of the income from the exhibits at the annual meeting to entertain the exhibitors at our annual convention as a goodwill gesture.

On motion of Dr. Zack Owens, seconded by Dr. Dewey Bridgers, the report of the Committee was accepted by a vote of 14 yea to one no.

The Committee Advisory to Blue Shield (Doctor's Plan) made a report in which was discussed the

background of the development of the Doctor's Plan and reported the following for the considerations to the Executive Council:

I believe that the American people still want a free choice of doctors and hospitals. We are at the crossroads. We must present an acceptable, workable plan and physicians must realize their responsibility in participating in this Plan or allow medical practice as we have known it to become extinct.

Why The Doctors Plan

Admittedly there are many good insurance policies available written both by Blue Cross and Blue Shield and commercial companies and many physicians are satisfied with these but is the public?

Each time a subscriber has to pay additional fees to the physician there is some degree of dissatisfaction. The chief difference between the Doctors Plan and other policies is that it is a service plan providing complete payment for service. If the fees set up in the plan provide adequate payment for the services, the physician should be satisfied and the policy-holder certainly will. The fees in every instance may conceivably not be exactly the fee the physician would have charged. However, if consideration is given to the fact that all fees are 100% paid and promptly, without repeating billings, the physician may readily accept some reduction in his usual schedule. Certainly no action by the Society could more surely promote good public relations.

Now, with that background, the last meeting of the committee discussed some of the reasons why this plan has not been more widely bought. One reason which is perfectly obvious, for one family it says it costs \$113 a year. It is limited to a family of \$3,600 total income.

It is perfectly obvious that is a right difficult amount of insurance for a family of \$3,600 income to buy. Those who are trying to sell the insurance point out that if they are going to sell large groups this insurance, they have to be able to sell all of the people on the payroll.

And in dealing, for instance, with DuPont Company at Kinston, they were very much interested in the plan, but they say, "We can't take it because so many of our people are working people with more than \$3,600 income, and we can't take the plan and tell half of our workers they can have it and the other half they can't."

Now, it is the consensus of the committee that we should be able to, we should allow our people to cover a plan to these particular companies particularly your manufacturing companies, which would carry a top income limit of \$6,000.

Now, it is perfectly obvious that if this \$6,000 income limit were established, then of course there would be an adjustment upward in the fees.

It has been estimated by the statisticians that you could increase the present schedule of fees by approximately one-third by adding only \$12 a year to the premium.

With that simple, sketchy background, the committee presented these resolutions which they asked me to present to the Executive Committee:

That we request the Executive Council approval to present to the County Medical Societies this winter the need for a \$6,000 family income limit service plan with a fee schedule substantially higher than the present Doctors' Program, and also to present the possibility of increasing income limits of the existing plan, leading to the presentation of such increased plan or plans to the House of Delegates in May of 1956.

If the income levels have changed, we don't mean that we want to present just say \$6,000 policy.

You have a policy now which has a \$3,600 income limit and carries a premium of \$113 a year. This \$6,000 would carry a premium of approximately \$125 a year, and we are not asking for authority necessarily to put this into effect immediately.

The thing that we principally want to do is to project this idea to the Society, to the Medical Societies, and acquaint them with the background for the necessity of doing it, and also with that intention of educating the Medical Societies to these; these sales people could look forward to a more stable conversation with the manufacturers if the possibility of this thing were developed.

But there would be certainly your agent's plans.

On motion of Dr. George Paschal, seconded by Dr. Lenox Baker, and carried the report was adopted.

The Committee on Legislation presented a discussion related to national legislation proposed to be introduced, introduced and projected, and prospective influence upon medicine, as well as to analyze the portents of such legislation upon the American people. Particular emphasis was given by Dr. J. Street Brewer, Dr. John S. Rhodes, and Dr. James P. Rousseau to aspects of social security legislation and the far reaching implications upon the peoples' economy, medical care, health and welfare. Dr. G. W. Murphy moved that the Executive Council resolved that the Medical Society of the State of North Carolina support the position of the American Medical Association in opposition to Social Security amendments and to seek favorable action on self-employed retirement deductions placed in trust from current earnings without discriminating taxation; that the resources and all of the facilities of this Society be pledged to the American Medical Association in the implementation of such action; and, that the various agencies of this Society be instructed to use all their facilities to carry out these aims. The motion was seconded by Dr. William Sams and, upon being put, carried unanimously.

On motion made, seconded, and carried, the report of the Committee to Study and Recommend Health and Accident Medical Report Forms was accepted wherein the Society had adopted the series of forms developed by conjoint deliberations of groups concerned with such report forms.

Based on considerations, and a specific unfavorable report, by the Committee on Finance the proposal to pay expenses of alternate delegates to AMA when not designated was rejected by the Council on motion of Dr. M. D. Hill, seconded by Dr. Zack Owens, and carried unanimously.

On motion of Dr. William Sams, seconded by Dr. Donald B. Koonce, the sum of \$200.00 was allowed to the Committee on Child Health to implement a spot survey on neonatal deaths in hospitals.

An interim report of the Committee on Chronic Illness was received as information. It made particular reference to preliminary plans to study the proposed transposed use of county tuberculosis sanatoria for the care of the chronically ill.

The Committee to Study the Integration of Scientific members presented a discussion report which indicated it would further study the question of a due for this newly authorized class of membership and techniques to be suggested to component societies in standards and processing of membership of this scientific membership. It was recognized by the Committee that the Constitution must be revised in order to effect this scientific

membership, and that it had been proper for this Society to so notify the component societies. The Committee discussion indicated it would work closely with the Committee on Constitution and By-Laws in implementing the integration of this new scientific membership. On motion made, seconded and carried the report was received.

On motion made, seconded and carried the President of this Society was authorized to communicate to the Mecklenburg County Society president and president-elect the suggestion to defer changing their constitution and by-laws related to integration until May 1956. (This is to record an action taken in conference by the Executive Council.)

On motion of Dr. William Sams, seconded by Dr. Zack Owens, the Council recommends to the House of Delegates that the following be authorized as Life Members of this Society (previously "Honorary Members"): George F. Lull, M.D., of Chicago, Illinois, and J. Grafton Love, M.D., of Rochester, Minnesota. Upon being put the motion, and resolution to effect, was adopted.

On motion of Dr. William Sams, seconded by Dr. Clark and carried, Dr. John B. Graham and Dr. William Nicholson were re-elected to the Editorial Board for the North Carolina Medical Journal.

On motion of Dr. M. D. Hill, seconded by Dr. Dewey Bridger and carried, a committee of three past presidents be named to study the president's jewel and to work out a satisfactory gift or token for practical use and a manner for presenting same at the Annual Sessions.

On motion of Dr. Zack Owens, seconded and carried, the Executive Council expressed the sense that the provisions by which the Medical Care Commission members, the members of Hospital Savings Board of Trustees and the N. C. Board of Medical Examiners are and have been elected in General Sessions be continued.

On motion of Dr. Lenox Baker, seconded by Dr. Milton Clark and carried, the Executive Secretary was authorized to issue Delegate Badges to all past presidents and past secretaries of this Society.

On motion of Dr. Lenox Baker, seconded by Dr. Milton Clark and carried, the Committee on Awards was authorized to establish the rule that in the event of multiple authors for a single award that the author awardees (group) of that particular award decide among themselves and report to the Committee on Awards who is the principal to whom the award should be made and that each other author among the awardees for that award shall be granted a certificate of record as to each contribution to the authorship.

On motion of Dr. John Reece, seconded by Dr. F. P. Brooks, and carried, the Intern-Resident Training Membership was extended to Dr. James Frank Hammett of Waynesville and Duke Hospital.

Dr. Zack D. Owens made a motion that the Committee on Legislation make a study of optometric efforts or agitation for laws authorizing the supercedance of optometry over medical doctors in the refraction of eyes and that the Committee, should it be indicated, seek appropriate enactment of law to prevent the encroachment of optometrists upon the practice of medicine. The motion was seconded by Dr. George Paschal and upon being put carried.

On motion of Dr. Donald Koonce, seconded by Dr. Zack Owens and carried, the Committee on Constitution and By-Laws was requested to delete the by-law section which require two members of the Committee on Arrangements be appointed from that component society jurisdiction in which the Annual Sessions are held.

A motion by Dr. F. P. Brooks, seconded by Dr. John Reece, amended a motion made by Dr. Zack Owens to the effect that the Committee on Constitution and By-Laws amend all committee structure whereby membership is required from Congressional Districts so as to require that membership emanate from medical districts instead. On being put the motion carried.

On motion of Dr. Lenox Baker seconded by Dr. William Sams those committees ending in the title of "welfare" be referred to the Committee on Constitution and By-Laws so as to be amended to end in the title expression of "Health" instead. The motion carried.

On motion of Dr. William Sams and seconded by Dr. Zack Owens, the Council recommended that the structure of the Public Relations Committee remain a staggered committee of three and that for those districts not represented by such structure for a given year that the president of this Society appoint in each a consultant member to the Public Relations Committee who will serve to meet and advise with said Committee on matters related to public relations. Upon being put the motion carried.

On motion of Dr. Koonce, seconded by Dr. Lenox Baker and carried, the Committee on Constitution and By-Laws was instructed to study the structure of all committees and make recommendations to this Council for amendments thereto.

On motion of Dr. Donald Koonce, seconded by Dr. William Sams, the Executive Secretary of this Society is authorized to issue certificates to individual delegates of component societies on the basis of certified list of elected delegates furnished to him by the secretary of the component society upon their election as provided in the Constitution and By-Laws of this Society. Upon being put the motion carried.

On a point of discussion it was the consensus of instruction that the 1956 program refer to the dates of Sunday, April 29 to Wednesday, May 2, and the Executive Secretary was so instructed. Moreover, a similar instruction that special tables be reserved for the Executive Council during the President's Dinner.

On motion of Dr. William Sams, seconded by Dr. Donald Koonce and carried, the Executive Secretary was authorized to word, design and have put into print a suitable document of charter for each of the ten Medical District Societies of this Society.

On motion of Dr. John Reece, seconded and carried, the question of redistricting the district medical societies by consideration for the distance and natural affinities of component societies was considered and referred to the Committee on Constitution and By-Laws.

A letter communication to this Society from John W. Bailey, Administrator of the Transylvania Community Hospital in regard to the medical staff's expressed interest in formulating a regulation as to the use of Pitocin and Pituitrin in the induction of labor in obstetrical cases was, on motion, made, seconded and carried, referred to the Committee on Maternal Health.

It was the consensus of view that certification of military service absence from the Society should be confirmed by letter inquiry directed to the officers of the Surgeons General of the respective branches of the Armed Forces of the United States.

A resolution of the Harnett County Medical Society "condemning the distribution of vaccines or treatment to other than to indigent patients by the

Health Department," was presented and reviewed with discussion. No formal action was taken on the resolution.

Various subjects were discussed as information accruing Councilors upon which no specific action was taken.

The Executive Council adjourned at 5:20 p.m.

Respectfully submitted,
James P. Rousseau, M.D., President

Attest:

James T. Barnes
Executive Secretary
April 20, 1956

THE SECOND MEETING OF THE EXECUTIVE COUNCIL

The Executive Council met at the Sir Walter Hotel, Raleigh, N. C., at 10:00 o'clock a.m., January 29, 1956, with President James P. Rousseau presiding. Six officers, nine Councilors and the past-president were present for a quorum. Dr. G. Westbrook Murphy rendered invocation.

Minutes of the previous meeting were approved.

A report was read from the Committee on Child Health wherein reference was made to the certain clerical and procedured arrangements for the Committee activities in undertaking and carrying into effect its study of the estimated 2,300 annual neonatal deaths of live born to the twenty-eighth (28) day of life. This report included a detailed budget of modest estimates in the aggregate of \$1,067.00 which included the three months expenditure of \$143.00 authorized by the Council in September of 1955. The budget estimate particularly involved the analysis and recording related to the reported neonatal deaths in 1954 of 2,117 of which 1,900 died in the first six (6) days of life. Carry-over stationery was excluded from the estimate; so the amount of \$1,067.00 is a net estimate of expenditures to be made from funds during 1956 including a commitment for \$143.00 expenses in 1955. On motion of Dr. William Sams, seconded by Dr. Henderson Irwin and carried, the report and the budget request were adopted.

Considerable discussion was directed to the Salk poliomyelitis vaccine distribution program as established by recommendation of the State (Governor's) Advisory Committee on Poliomyelitis, established in early 1955, and as carried out by the N. C. State Board of Health. There had been instances at the County level where the 70-30 percent ratio of allocation as between private medical patients and the indigent health department applicants for the vaccine, and there was some evidence of the desire that the vaccine be administered 100% under the health program in some counties. Moreover, an unallocated at production source of 160,000-cc was being sought for health program administration despite much indication that the health administration was not limited to low economic levels of families and that some vaccine in private channels was being privately administered to indigent, and that quantities were not in use for lack of public demand due to public doubts toward the vaccine which developed in 1955 and which sentiment had not become dissipated. Reports were made from the counties as determined by the ten Councilors which indicated general approval of the 70-30 ratio of distribution of the Salk vaccine as put into effect by the Board of Health on the basis of the State Advisory Committee during the year 1955. A motion of Dr. M. D. Bonner, seconded by Dr. Zack Owens, authorized a communication to be sent to

the N. C. Advisory Committee on Poliomyelitis (Governor's Committee) indicating the sense of this Society is that the local health department should be allowed, from purchases of the State Board of Health, and from the allocatable supply to North Carolina, any approved poliomyelitis vaccine from whatever channel when-as is required to meet the needs of that local health department, ever that need is determined and documented and approved by the county medical society. Upon being put the motion carried.

A verbal interim report of the Committee on Legislation was made by the Chairman, Dr. J. Street Brewer. Particular references were made to federal legislation as represented by measures to amend the Social Security Act (HR7225); to provide a federal system of medical care to dependents of members of the U. S. Armed Forces which the American Medical Association approves on the basis of a 30% contribution to the cost of purchased medical care and supportive services gained through the private practice and service facilities of the community in which the dependent is domiciled; except, where such facilities do not exist, that the government would render the services through medical personnel and federal facilities all of which care should be limited as to inclusion to the immediate dependents of the member, and; legislation designed to extend the Salk vaccine purchase . . . supply program initiated in the first session of the 84th Congress. No formal action on the report was undertaken, but individual Councilors gave indication of a consensus determination to inform the component societies on these federal bills with the point of views that each Society member would make the proper expression of views to the representatives in the Congress to guide them upon these important measures.

Dr. Harry L. Johnson reported as Chairman of American Medical Education Fund indicating that no more than 166 doctors contributed \$25,858.00 to the combined support of two medical schools and the AMEF in 1955, whereas AMEF had contributed \$210,000.00 to the three North Carolina medical schools. He discussed briefly resolutions from Surry-Yadkin Counties Medical Society and Sampson County Society on the question of dues increases to be earmarked for medical education . . . the latter recommending that a levy be made at the state level of \$30.00 per capita upon the membership. Surry-Yadkin had recommended a dues increase by \$20.00 per capita. On motion of Dr. George Paschal, seconded by Dr. T. P. Brinn and carried the reports were accepted as information to be referred to a committee to be appointed by the President for study and to report at the next meeting.

The Committee on Veterans Affairs presented a formal interim report on the request of the Veterans Administration that the intermediary contract between it and this Society for medical services to veterans be terminated. It was requested by the Committee that the matter not be concluded at the present time. On motion of Dr. William Sams, seconded by Dr. G. W. Murphy and carried, the report was received as information.

The request of the Ashe-Watauga Counties Medical Society to be allowed to become separate, particularly at the instigation of the Watauga group, was reported upon by Councilor M. D. Bonner and the Vice Councilor, Dr. Harry L. Johnson. The report was received with the understanding the Councilor should consider the matter further and present a recommendation as to dissolution at the Annual Sessions so that action could be considered by the House of Delegates.

Dr. J. M. Alexander of Charlotte presented a request for the N. C. Society of Internal Medicine in which they desired a study of the title of the "Section on the Practice of Medicine" and whether it should be changed to Section of Internal Medicine. Motion was made by Dr. Edward Schoenheit to authorize the designation of a Section on Internal Medicine in lieu of the existing title under the By-Laws. The motion was seconded by Dr. Donald Koonce and upon being put failed by a show-of-hands vote. A motion of Dr. William Sams, seconded by several, proposed appointment of a committee to work out a working relationship between Internists and General Practitioners Section of Medicine. Upon being put the motion was carried.

Dr. William M. Coppridge, Chairman, Committee on Medical Society Headquarters Facilities reported upon its activities in securing options on land tracts, committee inspections, description of the sites and lands inspected and the decision to call the option on the Dave Weaver tract of 51 acres of land at the total price of \$25,000.00 for which deed was being requested of the optionor, Dave Weaver. On motion of Dr. Henderson Irwin, seconded by Dr. Milton Clark the report of the Committee was accepted and authorized to continue its function with hearty endorsement and congratulations for its effective work. Upon being put the motion carried without opposition vote. On motion of Dr. Donald B. Koonce, seconded by Dr. William Sams the action of the Committee was approved.

On motion of Dr. G. W. Murphy, seconded by Dr. T. P. Brinn, the President was requested to issue an official call for a special meeting of the House of Delegates for Monday morning at 10:00 o'clock during the Annual Sessions to consider amendments to the By-Laws such as specified in the call as proper for the consideration of the House of Delegates. Upon being put the motion carried.

Dr. Joseph J. Combs, Secretary of the Board of Medical Examiners, reported a resolution from the N. C. Board of Medical Examiners as follows:

"That the Board of Medical Examiners approve annual registration of physicians provided that the fee does not exceed \$2.00 per registrant per year, and that the President and the Secretary present this matter at the meeting of the Executive Council of this State Society."

On motion made by Dr. Milton S. Clark, seconded and carried, the Council made record as approving the report of the N. C. Board of Medical Examiners as to annual registration of physicians.

A report for discussion was presented by Dr. Joseph J. Combs relative to a query propounded by the N. C. Board of Medical Examiners upon which an opinion had been issued by the Office of the Attorney General of North Carolina in December of 1955 on the subject of a corporation engaging in the practice of medicine. This report was discussed at great length as to the significance of the opinion and what course the physicians through this Society might take as to the clarification of the opinion of the Attorney General. On motion of Dr. William Sams, seconded by Dr. T. P. Brinn, the Council expressed the sense that the report be deferred as to publication and that the counsels of this Society seek further clarification from the Attorney General and in such form as he thinks best and thereafter make further study of the problem. Upon being put the motion was carried.

A formal request of the World Insurance Company, of Omaha, Nebraska, through its North Carolina Agent, C. M. Hooper, requested a designee to receive premium payments from a group

of North Carolina physicians holding one of the Company's Health and Accident Policies so as to qualify the Company to operate this fraction of its business as a "franchise" insurance under the State Laws as interpreted by the Company. On motion of Dr. Zack Owens (Chairman of the Insurance Committee), duly seconded, the Council received the letter as information for study and authorized such other study related to group health insurance as the Committee deemed proper and report at the next meeting of the Council. Upon being put the motion carried.

On motion of Dr. William Sams, seconded by Dr. Zack Owens and carried, the President-Elect of this Society, currently in that office, is designated to serve as the representative with voting power on the N. C. Health Council.

Dr. William Sams made a departing reference to a resolution (in the record) entitled "A Resolution to All Political Parties in the U. S. A.", and suggested it be given thought by each Councilor and be considered at the next meeting of the Council.

The Committee on Public Relations presented through the Executive Assistant (Mr. William N. Hilliard) an interim report encompassing among other items a formal resolution drawn for and on authority of this Society and its Executive Council which was read as follows:

THEREFORE BE IT RESOLVED, That the Medical Society of the State of North Carolina, through unanimous action of the Executive Council on September 25, 1955, does hereby earnestly solicit and request the Deans of the Duke University School of Medicine, the Bowman Gray School of Medicine, and the Medical School of the University of North Carolina, respectively, to make it a priority of the junior and senior medical students to be in attendance at the aforementioned Public Relations Conference on whichever of the dates is most convenient to their respective schools; and be it further

RESOLVED, That a copy of this resolution be forwarded to the Deans of the Duke University School of Medicine, the Bowman Gray School of Medicine, and the Medical School of the University of North Carolina, and that said Deans be requested to facilitate attendance and encourage the attendance of house officers and staff at the aforementioned Public Relations Conference.

It was affirmed that the Committee had placed this resolution in the hands of the respective Deans of the three medical schools in North Carolina and therefore the Resolution authorized by the Council on September 25, 1955 was set in the record. On motion of Dr. George Paschal, seconded by Dr. M. D. Bonner and carried, the report was accepted as information for the record.

The Committee on Rural Health presented an interim report. Particularly the Chairman made reference to the two proposals, as follows:

One is that we are asking that we try to have at least one of these Rural Health Conferences in each medical district every other year. Of the ten medical districts, we would have five holding a meeting some time during the course of one year, and then a little later, if it works out, we could ask that each county hold a meeting of some kind, an open forum, a discussion about health, inviting the farmers, the civic leaders, and all other community organizations to participate in at least one general meeting in a year on a county level. We feel that that would be a very fine thing.

On motion of Dr. Henderson Irwin, seconded by Dr. Zack Owens and carried, the proposal was accepted.

The Committee on Maternal Welfare (so labeled in existing By-Laws) presented an interim report of activities, program and particularly on participation in an Area AMA Meeting on Maternal Health as organized by the AMA Council on Medical Service, which report was enlightening and constructive. It specifically recommended the sentiment of members of the Committee that the Title be retained with the "Welfare" wording rather than "Health" as authorized by the Council on September 25, 1955. Moreover the Committee reported specific recommendations concluded at a Fall meeting of the Committee on Maternal Welfare as follows:

There were two recommendations made at the last committee meeting. The first one concerns the reporting of live-births and stillbirths. This is becoming an increasingly important problem, particularly now with Dr. McBryde's activity in his Committee on Child Health. The statutes of the state require the reporting of any infant who is twenty weeks or older, whether it be liveborn or deadborn. The reporting is based entirely upon age by menstrual history. A number of physicians have written to us and have pointed out that this history is totally unreliable, and they felt, and the Committee has felt, that the weight is a much more reliable factor. We would like to present to this group the recommendation that the Medical Society propose that live-births and stillbirths be reported on the basis of weight rather than on the basis of uterine gestation. The period of uterine gestation should be retained as reinforcement of the record, since omission might entail considerable legal difficulty. Any fetus weighing over 500 grams which shows any evidence of life after complete delivery should be reported as a live birth, and any fetus weighing over 500 grams which shows no evidence of life after complete delivery should be classified as a fetal death, or stillborn.

The second one, and this one concerns me more deeply, in spite of all our efforts, not only the Committee but all of the physicians in the state, and of the development of a hospital system and a roads system and everything else, North Carolina still maintains one of the highest maternal and perinatal mortality rates in the country. We think we should be doing better than this.

There are a number of reasons for it, one of which is that some 18 per cent of our patients are still delivered in the home, and 10 per cent of that 18 are delivered by midwives. We have discovered that many of these midwife deliveries are totally unnecessary. These people have money, could afford medical care. There has been a very nice study by Dr. Wester in Robeson County in which he has discovered that these patients who are delivered by midwives also seek no medical care for any other disorder. They just are not trained in medical care. We think that is a distinct weakness.

We have also found that in some communities there has been no coordinated effort to render obstetrical care to the indigent patient. Usually it is pretty good, but there are some where there has been no coordinated effort made.

The Committee recommended that as the first step in correction of these things that the Medical Society go on record as being willing to accept the responsibility for the care of the obstetrics patients in the state.

Additionally, the Committee on Maternal Welfare desires that its representation be extended to each of the three medical schools in the state. Dr. Donald Koonce moved the adoption of the report. Dr. Zack Owens seconded the motion. Upon being put the motion carried.

The Committee on Professional Liability Insurance (Ad Hoc) of which Dr. G. W. Murphy is Chairman reported as follows:

This group does not realize, and certainly our membership as a whole has no concept, of how precarious the situation is with reference to professional liability insurance. A few facts would illustrate what I mean.

The number of claims and the awards in claims has increased at a tremendous and alarming rate all over the United States. It is not unusual now to have awards of \$100,000, something in that neighborhood. The insurance premiums in one state in the last few years have risen 830 per cent. In the same length of time, one doctor out of every thirteen in the United States has been sued for malpractice. The hazard is so great and the volume of work or the volume of the insurance to be written is so small that our great insurance companies, as a rule, have had no interest in it. The insurance has become very difficult to secure.

About two years ago, the Underwriters Association applied to our Insurance Commissioner that the rates be raised . . . I think it was 95 percent, and he granted a raise of 50 percent. That is what has happened to us in this state.

Your President appointed a committee and made me chairman to consider this matter. We went into it quite exhaustively. We found that there was one company in the United States, a good, sound company, of good reputation, that had realized that this was a particular problem and was making an effort to solve it. I got in touch with that company, and the secretary of the company came to Asheville and brought the state manager there and we had quite a conference.

Out of that and out of that investigation—and we had enormous correspondence — there was evolved a plan for the writing of professional liability insurance for the Medical Society of the State of North Carolina. I have endeavored to reduce that plan to the simplest possible terms and put it in the form of numbered paragraphs, and I have no choice but to read it to you, so with your permission, I will begin:

1. The company is the St. Paul-Mercury Indemnity Company, 111 West Fifth Street, St. Paul 2, Minnesota.
2. The Program:
 - a. The furnishing of broad coverage by a very desirable company
 - b. A comprehensive educational program for Society members as to the cause, prevention, and management of claims; to be conducted jointly by Society and Company.
3. No requirement as to fixed percentage of membership of Society which must participate.
4. Insurance available to all Society members in good standing upon completion of the necessary application. The case of any member of questionable desirability will be referred to the Insurance Committee for review and discussion before any action is taken by the Company.
5. A thirty-day cancellation clause will be in effect.
6. The insurance will be produced and written as individual policies by the 125 Company agents in North Carolina.
7. A basic unit of \$5/15,000, with limits up to any amount, will be available.
8. A comprehensive policy covering professional liability, personal liability of the physician and his family, office or clinic pre-

ises, and coverage on surgical instruments and such other miscellaneous equipment, including furniture and fixtures necessary in the practice of his profession. However, professional liability alone will be available to those members who wish it.

9. Rates will be those presently accepted by the North Carolina Insurance Department as applied to all branches of medicine, to partnerships, and to assistants and technicians.
10. As soon as the program has been in effect for the period of 18 months, which is the minimum time sufficient to enable the Company to gather the experience, rate consideration will be given depending upon the loss experience that has been earned with the Company subject to approval of the North Carolina Bureau of Insurance.
11. Investigation of claims will be by the trained staff of Company. Defense of suits will be by attorneys mutually satisfactory to Society and Company.
12. Claims will not be settled by the Company without the consent of the insured unless the approval of the Society Insurance Committee has been given.
13. All claims reported to the Company will be reported to the Insurance Committee for review and consultation with representatives of the St. Paul as to whether an attempt should be made toward settlement or the case defended.
14. The Society part of program will be handled through the office of the Executive Secretary and under the direction of the Insurance Committee from the Society.
15. Members of the Society will serve as consultants and expert witnesses under the direction of the Insurance Committee.
16. The Company agrees to pay expert witness fees to members so utilized. If the Company considers such fees excessive, they will be referred to the Insurance Committee for adjudication.
17. Similar programs have been adopted in Oklahoma, Minnesota, Washington, D. C., Virginia and Georgia. A reduction of rates has occurred in Oklahoma and Minnesota; the two states where sufficient time has elapsed for such reductions to occur.

Major Advantages

1. A stable source of professional liability insurance in a widely fluctuating situation.
2. A most desirable educational campaign for members to be conducted jointly by the Society and Company.
3. A rate structure to be geared to loss experience in North Carolina (not country as a whole) with the prospect of reduction in rates.
4. An organized system for investigation and defense with skilled investigators and defense attorneys and utilizing the potentialities of the Society itself.
5. A considerable degree of control may be exercised by the Society.

There are a few other things which we consider important in the initiation of the program, but this in substance will furnish you with sufficient information upon which we hope you will be able to make a decision. Additional details of our proposal are contained in the file on this subject and submitted to the Insurance Committee of the

Society, September 22, 1955, with supplements of November 30, 1955.

Your committee recommends the adoption of this program. The comment is offered that its success will be in direct ratio to the intelligence and vigor with which the Insurance Committee of the Society performs its function.

Your acceptance at the bottom of this proposal will be sufficient to enable us to complete our negotiating.

Respectfully submitted:

G. W. Murphy, M.D., Chairman
George W. Paschal, Jr., M.D.,
Alban Papineau, M.D.
Thomas E. Forbes, M.D.
William T. Pettus, M.D.
William H. Boyce, M.D.

As I have written it, it has been approved first by the Company, it has been approved by all the members of the Committee except Dr. Boyce, and I have not heard from him. He has not declined to approve of this, but I just have not heard from him. I invited all of the members of the Committee to be present here to join in the discussion and I also said that if anybody wanted to submit a minority report, I would be glad to read it or have them do so in person.

If by any chance the Society should approve this plan, there is a place down here for it to be signed by the President for the Society, and another place to be signed by the Secretary of the St. Paul-Mercy Indemnity Company. Then the President would appoint an Insurance Committee.

On motion of Dr. Leslie Morris, seconded by Dr. Edward Schoenheit, the report was adopted by a unanimous vote of the Council.

Report on the Social Security survey conducted by the headquarters office.

By action of the House of Delegates of the American Medical Association meeting in Boston, it was asked that state associations determine the sentiment of the members about certain questions relating to inclusion in the Social Security System, and so, with authority of the President, headquarters devised this poll card, which was sent to every member of the State Medical Society, about the 20th of December. It asks the following questions:

In reference to the present Federal Social Security System of Old Age and Survivors Insurance and as to my personal inclusion as a self-employed person, I register the following preference (one only):

(1) I favor compulsory inclusion of physicians, including myself, and amendments to the Act to do so.

(2) I favor voluntary inclusion of physicians, including myself, and amendments of the Act to do so.

(3) I do not favor inclusion of physicians, including myself, under either voluntary or compulsory provisions, and therefore oppose any amendments to the Social Security Act.

Finally, down at the foot of the card, as additional information:

I would favor personal untaxed private trusts, as provided under the proposed Keogh-Jenkins Bill.

On the question of favoring compulsory inclusion, there were only 52 returns from physicians favoring that. On those favoring voluntary action, there were 905, and of those, 361 checked that they favored the Keogh-Jenkins Bill.

On question No. 3, "I do not favor inclusion of physicians," there were 629, and of that category

checking for Keogh-Jenkins, there were 381. Checking Keogh-Jenkins only, there were 811, and there were three that did not vote and 66 that returned the card without any markings to indicate any sort of attitude or expression at all.

The American Medical Association wants this information. It will not determine any policy, but it will just be an index to the American Medical Association as to what the physicians of the country are thinking.

On motion of Dr. Leslie Morris, seconded by Dr. John Reece and carried, it was authorized that the information be sent to the American Medical Association.

A report from the Committee on Mediation was read as follows:

As Chairman of the Mediation Committee, I submit the following recommendations:

1. That Drs. Ingalls and Watters work together on a partnership or percentage basis demonstrating to the public there is no friction.

2. Since the physical plant at Richmond County Memorial Hospital will not permit office space for both surgeons, and Dr. Watters owns the Clinic Building in Rockingham which was designed for offices for two surgeons, that this building be utilized by both surgeons for their offices. A mutual agreement being worked out between Drs. Ingalls and Watters relative to office space.

3. That the partnership between Drs. Watters and Covington be dissolved so that the general practitioners of Richmond County will know that only surgical patients are being seen in Dr. Ingalls' and Watters' offices.

4. That Dr. Watters make an effort to straighten out his difficulties with the American College of Surgeons.

Sincerely,

Roscoe D. McMillan, M.D.,
Chairman, Mediation Committee,
Medical Society of the
State of North Carolina

On motion of Dr. Zack Owens, seconded by Dr. G. W. Murphy and carried, the report and recommendations were adopted.

The Committee on the Presidents' Jewel reported as follows:

We wish to honor the presidents of the Society giving an emblem with a small chip diamond in the center in lieu of the present obsolete Jewel. We think that it would be more appropriate and that it could be worn as a lapel button and perpetuate the memory and the honor and dignity of the President of the Society.

We also recommend that on the night of the formal banquet, all Past Presidents wear a green ribbon as an insignia of the medical profession—I believe that is the official color of the medical profession—and we would like to so recommend, that the Council approve this change.

On motion of Dr. Zack Owens, seconded by Dr. Leslie Morris and carried the report and recommendations were adopted.

On motion of Dr. Leslie Morris, seconded by Dr. Milton S. Clark, this Society was authorized to purchase such Jewels for each of the surviving past-presidents. Upon being put the motion carried.

On motion of Dr. Zack Owens, seconded by Dr. George Paschal and carried, the Committee on the Coroner System was authorized to negotiate with the County Commissioners Association for this Society's sponsorship of a speaker on their program in the person of Dr. Ford of Harvard University and that this Society authorize and

pay the essentials of expense in arranging Dr. Ford's appearance before said state-wide group of county officers.

The Executive Council supported the President in having declined the precedent of providing expense to a non-official representative to the National Rural Health Conference. This action was taken on motion of Dr. G. W. Murphy, seconded by Dr. Donald Koonce, and carried.

There being no further business the Council adjourned at 6:10 o'clock p.m.

Respectfully submitted:

J. P. Rousseau, M.D.
President

Attest:

James T. Barnes
Executive Secretary
April 20, 1956

[The following are the Reporter's excerpts from proceedings of the Executive Council minutes of April 29, 1956—to which reference was made on page 21 hereof.]

SUNDAY MORNING SESSION April 29, 1956

Dr. Koonce: I would like to make a motion for three things; First, that the Executive Secretary be given the right to hire and fire all executive personnel with the exception of the two executive officers besides himself, the Assistant Executive Secretary in charge of Public Relations and Mrs. Boutwell, the Health Education Consultant; that a budget be set aside for executive purposes whereby he has the right (this is my second motion) to sign checks for executive office expenses and salaries; and my third motion, which will have to go before the House of Delegates according to the new constitution and the old constitution (the other two don't) is that in order to show him our confidence in him and renew our faith in him and insist that he stay with us, that we ask the House of Delegates to reappoint him for three years as of this meeting.

Dr. Sams: I want to make a motion, sir, that this Executive Council go on record as thoroughly endorsing the record of both Dr. Millard Hill as Constitutional Secretary and Treasurer and James T. Barnes as Executive Secretary, and this Executive Council hereby fully endorse both of them and beg them with all of our heart to stay in the harness, and let's go.

Motion By Dr. Irwin: That the Ashe-Watauga County Medical Society dissolve on condition that each county organize its own medical society.

Dr. Paschal's Motion: In response to the letter from the Davidson County Medical society re Dr. P. M. Sherrill, that the suggestion as to remission of dues already paid is considered impractical and the Council advises against returning this money.

Motion By Dr. Sams: That the Council goes along with the resolution on child placing and recommends it to the House of Delegates for their disposal.

Motion By Dr. Sams: That the Lee County resolution on alcoholic test be received as information.

Motion By Dr. Sams: That the expenses of the Student AMA Presidents in attending the National Convention be paid; that the Presidents of the Student AMA at each school be invited to attend

the House of Delegates as ex-officio members; but that the establishment of a Student Section of the Society be not approved.

Motion By Dr. Irwin: That the Report of the Committee on Prepayment Insurance for Indigent Patients be accepted.

Motion By Dr. Clark: That the Report of the North Carolina Board of Medical Examiners be accepted.

Motion By Dr. Murphy: That the Executive Council recommend to the House of Delegates that the recommendations of the Legal Liaison Committee to Work with the North Carolina Bar Association be accepted as a policy of the Medical Society of the State of North Carolina, and, having been adopted by the Bar Association, it become operative and that the recommendations become effective.

Motion By Dr. Garrison: That the Report of the Committee to Study Integration of Negro Physicians into the Medical Society of the State of North Carolina be accepted.

Motion By Dr. Clark: That the Report of the Anesthesia Study Commission be accepted.

Motion By Dr. Sams: That the resolution presented by the Committee on Veterans Affairs be adopted.

SUNDAY AFTERNOON SESSION April 29, 1956

Motion By Dr. Clark: That the name of the Section on General Practice of Medicine be changed to the Section of Internal Medicine.

Motion By Dr. Irwin: That the Report of the Committee on Mental Hygiene be accepted.

Motion By Dr. Brooks: That the Report of the Committee to Work with the North Carolina Industrial Commission be accepted.

Motion By Dr. Sams: That the Report of the Public Relations Committee be received.

Motion By Dr. Sams: That the \$750 due to the Maternal Welfare Committee to cover money received by them last year from another source which was erroneously supposed to be money left over from the funds allocated to them by the State Medical Society be paid.

Motion By Dr. Sams: That the Annual Report of the Medical Advisory Committee on the Doctor's Insurance Plan be adopted with the heartiest commendation by the Executive Council to Dr. London and his committee for the very fine job they have done this year.

Motion By Dr. Sams: That the resolution in regard to Insurance for Government Employees be adopted.

Motion By Dr. Sams: That the Report of the Committee on Increase in Dues be tabled.

Motion By Dr. Sams: That a communication from the Caldwell County Medical Society, dated April 25 on the Hospital Saving Association's new Doctors' Plan be referred to the Mediation Committee, asking them to conduct a thorough investigation of the charge of the Caldwell County Medical Society.

Motion By Dr. Paschal: That the Council authorize the distribution of the Automotive Injury Research Report in the House of Delegates.

Motion By Dr. Sams: That the rental of additional office space for the headquarters office costing \$40 a month be approved.

Motion By Dr. Sams: Adoption of a resolution concerning Dr. Lull and a similar resolution concerning Dr. Love relating to Honorary Membership.

Motion By Dr. Sams: That the request of the President-Elect for appointment of the Committee on Crippled Children and a committee to go into the committee structure of the State Medical Society with a view to possible greater efficiency be granted.

Motion By Dr. Paschal: To ratify the approval of two intern resident members who have been recommended by their County Societies, namely Dr. George Walton Fisher, of Durham, N. C., and Dr. Ben J. Lawrence, Jr., of Black Mountain, N. C.

Motion By Dr. Sams: That Dr. Wilburt C. Davidson's recommendation regarding a bill to be entitled An Act to Regulate the Sale of Sodium Hydroxide or Concentrated Lye be endorsed and passed on to the Legislative Committee for presentation to the incoming legislature.

THE FOLLOWING MOTIONS WERE PASSED IN RESPONSE TO REQUEST OF DR. McMILLAN, OF THE COMMITTEE ON CONSTITUTION AND BY-LAWS FOR ADVICE AS TO THE ATTITUDE OF THE COUNCIL ON VARIOUS POINTS:

Motion of Dr. Sams: That the Council endorse the recommendation of the Committee on Constitution and By-Laws that the House of Delegates from 1962 on be the ones to elect the State Board of Medical Examiners, and that the Constitution and By-Laws be revised to that effect.

Motion By Dr. Sams: That the Council send the question as to reallocation of Counties to Councilor Districts back to the various district meetings to discuss and ascertain if the doctors in the districts would like to consider reallocation.

Motion By Dr. Schoenheit: To adopt a suggestion with reference to putting into the Constitution a section on Discipline and Grievance Committee action.

Mr. Barnes has just pointed out that it should be accepted.

Dr. Wolfe: I move that it be accepted.

[The motion was seconded by several, was put to a vote and carried.]

Speaker Murphy: The next is Legal Liaison Committee to Work with the North Carolina Bar Association, page 41, T. S. Raiford. That has been adopted and approved by the Executive Council and recommended to you for your adoption. Dr. Raiford, do you want to add to that report?

Dr. Raiford: Mr. Speaker and Delegates: Since this is a relatively new venture I think a couple of words of explanation might be in order. The Code as proposed speaks for itself. I think it is quite self-explanatory. It should be pointed out that this is not legislation in any way, manner or form, but an attempt to arrive at a gentleman's agreement between the legal and medical professions.

Due to the peculiarity of the organization of the State Bar Association, they were unable to include in the recommendations which you read on page 41 the fourth recommendation which we think is necessary for the State Medical Society, and this I would like approved as a fourth recommendation to read as follows:

That the Code be referred to the County Medical Societies to be put into action at that level with such modifications as may be necessary for that particular locale.

Speaker Murphy: Do you care to move adoption of this report?

Dr. Raiford: I move the adoption of this report as amended.

[The motion was seconded by several.]

Speaker Murphy: I want to say that this is an extraordinarily fine piece of work that is going to prove profitable to all of us. Is there any discussion? If not, all in favor say "aye"; opposed, "no." It is carried.

The Committee on Group Health and Accident Insurance, Dr. Owens. Is Dr. Owens here?

Dr. Owens: Your Committee has been active in studying the various plans by different insurance companies. We call attention to the fact that our present company, the Commercial Insurance Company, that has been our official agency for the past fifteen years, has proved to be quite satisfactory. In some instances, there are probably features of a different company that may appear attractive. On the other hand, our present insurance company has some features which this company does not.

Your Committee is interested in a new plan which the Florida State Medical Society has recently instituted with the Continental Casualty Company of Chicago, and also a plan of the Southern Medical Association. We are not in position to make any change in our present plan at this time. However, we are interested in obtaining the experience of the Florida State Medical Society Plan, which we feel is rather attractive.

The Committee would like to recommend extension of further study on this program, and I so recommend.

Speaker Murphy: The Committee recommends continued study. Do I hear a motion?

Dr. Crump: I move that it be received.

[The motion was seconded by Dr. Atkins, was put to a vote and carried.]

Speaker Murphy: The next report is the report of the Committee on the President's Jewel.

Dr. Owens: Mr. Speaker, President Rousseau, and Members of the House of Delegates: The Committee to Report on the President's Jewel was appointed by President Rousseau and was composed of Dr. Joseph A. Elliott, Dr. Westbrook Murphy, and myself.

We have made a complete investigation. We have consulted a number of the Past Presidents, and while we are all very grateful and appreciative of the high honor you have bestowed upon us, we feel that such an important jewel as you have given us more or less is out of date at the present time. Apparently the jewel was originated in 1797. Upon its face it has, I am not sure whether it is Hippocrates or Aesculapius. It is a beautiful thing, but it was designed in the days when we wore watch fobs and possibly later on watch chains. They are out of date now, too.

We feel that the high honor which this jewel represents should be perpetuated in some way. It is impractical to wear the jewel at the present time. It is pinned upon the lapel of the President the night of the banquet, and is taken home, and probably it remains in his wife's jewelry box.

We felt, in keeping with modern times, in order to perpetuate the dignity and honor of this high office that you have bestowed upon us, it would be more appropriate to have a lapel button somewhat similar to the one that is worn by past presidents of Rotary, The American Legion, and other organizations, which we could wear in our lapel and be proud of.

That was recommended to the Executive Committee, and it was adopted and approved. I have several suggestions which are impractical to show at this time and which the Committee feels would be satisfactory.

Another thing which we thought would be fine and in keeping with our office is, that on formal occasions, the Past Presidents would wear a ribbon as the insignia of their office, of green and white, representing the medical colors. That was also approved by your Executive Committee.

Mr. Speaker, I now move the adoption of these two suggestions.

[The motion was seconded by Dr. Crump.]

Speaker Murphy: Is there any discussion of this motion, that the lapel button be substituted for the ancient President's Jewel and that the Past Presidents at the banquet wear a ribbon of the green, which is the insignia of the degree of doctor of medicine, to designate their office? Is there any discussion? If not, all in favor say "aye"; opposed, "no." It is carried.

There is one other Committee report on Blood Program. They have no report, and there has been no activity on that Committee and no action is required.

Is there any new business to come up? If not, I call your attention to the fact that the second meeting of the House of Delegates will be at two-thirty the afternoon of Wednesday in the small card room for the usual routine matters of business, as well as the final vote on these By-Laws, not the Constitution—that has to lay on the table for a year. We will vote on the By-Laws which were voted on tonight. If you want to change them in any way on Wednesday afternoon, you have the privilege.

The Chair will receive a motion to adjourn.

[Upon motion regularly made and seconded, the meeting was adjourned at ten-fifty o'clock.]

TUESDAY AFTERNOON SESSION

May 1, 1956

The second special meeting of the House of Delegates convened in the Ballroom at two o'clock, Dr. Murphy, Speaker of the House, presiding.

Speaker Murphy: Will this special session of the House of Delegates come to order? This is a continuation of the special session.

As you know, we have one simple item of business, and that is to reaffirm, if it is your pleasure, the adoption of the change in the By-Laws, as passed yesterday, which would provide for the installation of the President this evening, and certain subsidiary changes.

Dr. McMillan: Mr. Speaker, I move to amend Chapter V, Section 3, of the By-Laws, by adding at the end of said Section the following:

... provided, however, that the President-Elect shall be installed and take office as President at such time during the Annual Meeting of the Society as fixed by the Executive Council.

[The motion was seconded by Dr. Crump.]

Speaker Murphy: Is there any discussion of this motion? If not, all in favor say "aye"; opposed, "no." The motion is carried, and, Mr. President, so far as I know, that is the entire business, so we in Special Session stand adjourned, and thank you for being patient.

[The meeting adjourned at two-twenty o'clock.]

WEDNESDAY AFTERNOON SESSION

May 2, 1956

The second meeting of the House of Delegates convened at two forty-five o'clock in the small card room, Dr. Murphy, speaker of the House, presiding.

Speaker Murphy: These figures were just handed to me, that we had 1022 members registered, which is an all-time high, and the total registration is 1997 people.

Mr. Barnes: I would like to see three more register and get us past the 2000 mark.

Speaker Murphy: We come to a very happy duty, and that is to read two resolutions which were authorized last year by action of the Executive Council and the House of Delegates, duly passed, but they are to be read for the record, and Dr. Zack Owens is going to read one and George Paschal the other.

Dr. Owens: Gentlemen, as our Speaker of the House has just said, this is an authorized resolution:

Whereas, George F. Lull, M.D., of Chicago, Illinois, is a graduate of Jefferson Medical College and licensed medical doctor in the State of Illinois; and

Whereas, He has exemplified great distinction in his career as a physician, military leader in the defense of his country, and lately of great distinction as the Secretary-General Manager of the American Medical Association, during which he has sacrificed great personal effort in bringing modern medicine and its supportive organizations into a more efficient state of responsibility, concern and activity in service to humankind everywhere; and

Whereas, He has generated in the hearts and minds of the members of this Society an admiration and an affection for his personal leadership and association in affairs of health and medical care related to the welfare of the people of this State; therefore, be it

RESOLVED, That the Medical Society of the State of North Carolina bestow upon said George F. Lull, M.D., the high distinction of Honorary Member to the end that he may forever be recognized among the members of this Society with love, affection, and esteem; and that he shall enjoy all the rights and privileges afforded by this rank of membership in this Society, forever. This, the 30th day of April, 1956, A.D. [Applause]

Dr. Sams: Mr. President, I move you, sir, that we adopt this resolution and I ask that it be spread upon our minutes for all time to come.

Dr. Ben Royal: As a classmate of George Lull's, I should like the privilege of seconding that.

Speaker Murphy: We have the unusual privilege of having Dr. Lull with us, and if he has anything that he cares to say to us, we will be happy to hear it.

Dr. Lull: I am overcome. I am an Honorary Member of only one other organization, and that is the Naples Yacht Club in Italy, and I don't own a yacht. I accept this with all due humility, and I hope that I will continue to attend as a regular attendant your meetings. As you know, I have attended more meetings of the State Society of North Carolina than any other state society in the Union. [Applause] You can see from that how I enjoy being with you, and I know my wife en-

joys the hospitality that your wives show her when she comes to North Carolina. As I said previously, I accept this with all humility and hope that I will at least not disgrace the Society and that I may bring some credit to it. Thank you very much! [Applause]

Dr. Dixon: Before we put that to a vote, I would like to extract from Dr. Lull a promise that he will continue to come back as long as he is physically and mentally able.

Speaker Murphy: It has already been put to a vote, but I am sure he will give us that promise.

Dr. Lull: I will.

Speaker Murphy: Now we have the privilege of hearing another resolution which Dr. George Paschal will present. This only requires reading. The motion has already been passed.

Dr. Paschal: I submit to you the following resolution:

Whereas, J. Crafton Love, Chief of the Department of Neurosurgery, Mayo Clinic, Rochester, Minnesota, is a licensed medical doctor in the State of Minnesota; and

Whereas, He has brought great distinction to this, his native state, his Alma Mater, Wake Forest College, and to the University of Pennsylvania from which he received his doctorate with honors; and

Whereas, He has won great distinction in his career as a physician, teacher, educator, contributor of substantial substance to the progress and advancement of the specialty of neurosurgery to the extent that he has been in demand as speaker for important state, national and international groups from whom he has received recognition and he has earned the admiration and affection of the members of this Society; therefore, be it

RESOLVED, That the Medical Society of the State of North Carolina bestow upon said J. Crafton Love, M.D., the high distinction of Honorary Member to the end that he may forever be recognized among the members of this Society with love, affection and esteem, and that he shall enjoy all of the rights and privileges afforded by this rank of membership in this Society, forever.

This the 30th day of April, 1956, A.D. [Applause]

Speaker Murphy: Dr. Love is not here.

Dr. Paschal: Mr. Speaker, in regard to these resolutions which have just been submitted, I suggest that a copy be sent to Dr. Lull and Dr. Love.

Speaker Murphy: That will be done.

We come next to the report of the Nominating Committee. The Chair has been told that Dr. George Holmes, of Winston-Salem, will report for the Committee.

Dr. George Holmes: Following is the report of your Nominating Committee. I think this item has probably been covered, but we would like simply to get it into the record as a recommendation from your Nominating Committee. It was recommended that Section 3 of Chapter V be changed to read: "Report of Nominating Committee and election of officers be submitted at the first meeting of the House of Delegates instead of the second meeting of the House of Delegates." I believe that has already been taken care of.

The name of Dr. William Bell is placed in nomination as Vice Councilor of the Second District to serve out the unexpired term of Dr. F. M. Simmons Patterson.

Following is the slate of officers for the coming

year: For President-Elect, Dr. Edward W. Schoenheit, of Asheville; for First Vice President, Dr. John S. Rhodes, of Raleigh; for Second Vice President, Dr. O. Norris Smith, of Greensboro.

Dr. G. Westbrook Murphy, of Asheville, is recommended as your Speaker of the House of Delegates; Dr. Lenox D. Baker, of Durham, as Vice Speaker of the House of Delegates.

The Nominating Committee respectfully requests that the Committee on Constitution and By-Laws of the Medical Society of the State of North Carolina should definitely establish a geographical line dividing the state into east and west halves for the purpose of expediting its work.

The Nominating Committee recommends that the next meeting of the North Carolina State Medical Society be held at the Carolina Hotel, Pinehurst, North Carolina, if it is expedient in the judgment of the Executive Committee; if not expedient, the Nominating Committee recommends that the meeting be held in Asheville, North Carolina.

The report is respectfully submitted by Claude B. Squires, Chairman of the Nominating Committee, and George W. Holmes, Secretary.

Speaker Murphy: Since my name appears on the list of nominees, I will ask the Constitutional Secretary to assume the Chair.

[Dr. Hill assumed the Chair.]

Chairman Hill: Do you move that this slate be adopted?

Dr. Holmes: I move the adoption of the slate and the report of the Nominating Committee.

[The motion was seconded by Dr. Lawrence.]

Dr. Lawrence: It seems to me that everybody is in favor of it, but I would like to ask how we are going to be practical about dividing the state into east and west? Is that to be an order of this House of Delegates or is that a recommendation to the effect that general geographical lines be observed?

Dr. Squires: That is only a recommendation to the Constitution and By-Laws Committee headed by Roscoe McMillan.

Chairman Hill: You have all heard the explanation. Is there any further discussion? If not, all in favor of the report and recommendations of the Nominating Committee let it be known by saying "aye"; all opposed, "no." It is so ordered. [The Speaker resumed the Chair.]

Speaker Murphy: May I have just a word? Just as soon as this meeting is over, I am going to have the pleasure of taking Dr. and Mrs. Lull to Asheville and I must get going and won't be here at the time of the general session. May I say on my behalf that of course I am really quite humble that you should have chosen me as the Speaker of the House again, but you are making a mistake.

Dr. Dixon: We can't do any better.

Speaker Murphy: You are making a mistake, because there are so many men available, and I know you are tired of me. If you don't stop this business, I will soon think I have got squatters' rights, and that wouldn't be good. I do appreciate it anyway. That is my speech of acceptance, you see.

Now we come to an item that is of great significance, and that is the final ratification of the By-Laws as passed at the last session. The Chairman of the Committee on Constitution and By-Laws tells me that it can be done by a motion which would ratify finally these By-Laws as they were read, and it will not be necessary to read the entire thing over.

Dr. McMillan: Mr. Chairman, I would like to have the motion read, "as mimeographed and read."

Speaker Murphy: See if we can't do it this way: That if a motion were made that the By-Laws be finally ratified as mimeographed and read and then, in the discussion of that motion, anyone who wished to change any section, he could ask that that be read.

In discussions of the motion, anyone who is interested in any particular section could ask that that be read, and that could be eliminated from the blanket motion. Then, when we got through, we might have one or two items which we could go back and consider separately.

The Chairman says that that is according to parliamentary law. Is there such a motion?

Dr. Squires: I so move.

[The motion was seconded by Dr. Rousseau.]

Speaker Murphy: Is there any discussion? I am sure some of you have some things that you want to bring up. Now is the time to ask that any section which you have any doubt be read.

Speaker Murphy: Gentlemen, the House of Delegates passed a motion to recommend to the Legislative Committee that they undertake to get an amendment to the Medical Practice Act providing biennial physician registration. That was a motion passed by the House of Delegates, and when we get through with this Constitution and By-Laws, if you should care to make a motion to rescind the physician registration action, we can do so, but it has nothing to do with the By-Laws, which is the subject under consideration.

Dr. Sams: Another thing that I have been asked about so much this morning was the section (of By-Laws) relative to the formation of a Nominating Committee. Can you read that section for me, or had we better wait for that?

Speaker Murphy: He raises the question of the section providing for the Nominating Committee. Suppose we just make a note of that, Dr. McMillan, of the sections brought under question, and then take them up one at a time.

Is there any other section of the By-Laws as passed and mimeographed that we want to consider?

Dr. Blackmon [Harnett County]: Will you read that first sentence in the Publication.

Dr. Blackmon: Publication of the Journal. I think we have it misworded to the point that the Editor Dr. Johnson cannot publish a paper that has not been presented at the Medical Society.

Speaker Murphy: That is not correct. We have already talked about it, but we will put it down to talk about later. That is Item No. 2.

Is there any other thing in the By-Laws that you want to discuss and perhaps reconsider? If so, please be free to bring it up.

If there is nothing further, I will put this motion, that the By-Laws, as adopted and mimeographed, be approved with the exception of those two things and then we will come back to them.

Dr. Sams: I make that motion.

Speaker Murphy: All in favor of that motion say "aye"; opposed, "no." It is carried.

Dr. McMillan, will you take up those two sections now? The first one was the Nominating Committee.

Dr. McMillan: Read Chapter V, Section 2.

Dr. Coppridge: Would I be in order to offer a revision at this time, or would that come under New Business?

Speaker Murphy: Is it a revision of something already passed?

Dr. Coppridge: It is a revision of this section you are speaking of.

Speaker Murphy: Dr. McMillan says yes, that it would be in order.

Dr. Coppridge: I offer this in the form of a motion for revision of the By-Laws as it affects Chapter V, Section 2. Beginning at the end of the sentence in line 7, Section 2, insert this:

No member of the Nominating Committee shall be eligible to succeed himself but once, thereby limiting his eligibility to election to two consecutive terms. He may, however, be elected again to said Committee after a lapse of one year out of office on the Committee.

Then again, in the same Section, beginning on line 10, Section 2, the sentence shall read:

It [that is, the Nominating Committee] shall make its report at least two weeks before the Annual Meeting to the President of the Society in a sealed, confidential letter, this report to remain unopened until presented and read by the President to the House of Delegates at the time designated for the report of the Nominating Committee to the House of Delegates. I move the adoption of that.

Dr. McMillan: You would have to vote on those separately, Mr. Speaker, wouldn't you?

Speaker Murphy: First let's clear up this question: Can we now pass this and make it final, or does that have to lay over on the table?

Dr. McMillan: It would have to lay over on the table for 24 hours.

Dr. Coppridge: That was my reason for asking if I was in order.

Speaker Murphy: I believe that is correct. We will put Dr. Coppridge's motion in a little bit. Is there any other question about this Section as read?

The final adoption of this paragraph, as presented, would require a second consideration. That doesn't mean that we can't revise it. Is there any further discussion? As I understand it now, it is a question of accepting or rejecting that paragraph.

Dr. McMillan: Of what has already been passed, that is correct, sir.

Speaker Murphy: All in favor of the motion to accept say "aye"; opposed, "no." It is carried.

Let's go to the second item, the point that Dr. Blackmon raised about the phraseology concerning publication in the Journal.

Dr. McMillan: Mr. Chairman, I move the amendment of this on page 42 to read:

Papers presented before the Society must be in writing in order to be eligible for awards or publication, et cetera.

Does that cover it?

Speaker Murphy: That is a change in the phraseology and does not change the meaning, the Chairman rules, and therefore it can be passed now. It has been moved and seconded. Is there any discussion?

[The motion was put to a vote and carried.]

Speaker Murphy: Now Dr. Coppridge wishes to propose an amendment which will be for your consideration on the first reading, and, if passed, will have to be reaffirmed at the first meeting next year, but could become effective if passed next year. He makes a motion that this be adopted.

Dr. Coppridge: Beginning at the end of the sentence in line 7, Section 2, reading from mimeographed copy insert this:

No member of the Nominating Committee shall be eligible to succeed himself but once, thereby limiting his eligibility to election to two consecutive terms. He may, however, be

elected again to said Committee after a lapse of one year out of office.

I move its adoption.

Speaker Murphy: Is there a second to that motion?

[The motion was seconded by several.]

Speaker Murphy: Is there any discussion of the motion that this amendment be adopted on its first reading?

[The motion was put to a vote and carried.]

Dr. Coppridge: The second portion, beginning on line 10, Section 2, (reading from mimeograph copy) the sentence shall read as follows:

It shall make its report [that is, the Nominating Committee] at least two weeks before the Annual Meeting to the President of the Society in a sealed, confidential letter, this report to remain unopened until presented and read by the President to the House of Delegates at the time designated for the report of the Nominating Committee to the House of Delegates.

I move its adoption.

[The motion was seconded by Dr. Garvey.]

Speaker Murphy: Is there any discussion? (Discussion ensued.)

Dr. Coppridge: The only change from an ordinary report is that it would remain confidential for obvious reasons. It could be perfectly public as far as I am concerned, but I think the majority of the Society would prefer that the report of the Nominating Committee remain confidential until it is announced.

Dr. Harloe: The older men of the Society are the men who deserve the prestige of being the officers, I think, and we will all live under the threat of dying one day. How would you go about it if one of the candidates proposed in this Committee report would die between the time the letter was mailed and the day it was opened?

Speaker Murphy: Dr. McMillan has a thought.

Dr. McMillan: I wonder if that could not be taken care of by just adding that the members of the Nominating Committee should clear it up in case of a death between the time they mailed that letter to the President and the time of the meeting.

Speaker Murphy: That the phrase be added to the effect that if any nominee should become unavailable in that two-weeks' interval, his successor would be chosen by the Nominating Committee.

Dr. Coppridge: That is all right. I accept that.

Speaker Murphy: He accepts that amendment. Does the man who seconded that accept it?

Dr. Garvey: I accept it.

Speaker Murphy: Is there any further discussion? If not, all in favor say "aye"; opposed, "no." It is carried.

For the record, the Chair would like to make it quite plain that this is the first reading and you will have another chance to vote on this next year before it goes into effect.

That concludes the business of the revision of the By-Laws, and now we come to the report of the Committee to Review the President's Address, Dr. Coppridge, Chairman.

Dr. Coppridge: Mr. Chairman and Members of the House of Delegates: This is the report of the Committee to Review and Make Recommendations on the Addresses of the President of the Society:

On Monday night, before the House of Delegates, our President, Dr. Rousseau, made a scholarly address summarizing the actions of the Executive Council during the past year.

It was full in its scope and rich in facts, depicting the progress of the affairs of the Society during the past year. It was well received by the House of Delegates.

On Tuesday, before the General Session of the Society, the President delivered an outstanding address. The members of the Society have seldom been treated to so eloquent an appeal from their President. Under the leadership of President Rousseau, this Society has had a most successful year of accomplishment.

Someone has said: "There is nothing so inconsistent as consistency." Yet, throughout the long years since 1799, the Medical Society of the State of North Carolina has selected and elected leaders who have led the Society on, under, around, or through difficulties which, at times, appeared insurmountable, and into the bright beyond.

This year has seen no deviation except that, in a very broad sense, our retiring President has met his every challenge in such a quiet, statesmanlike manner that he has accomplished what he has set out to do without having offended or ruffled the feelings of anyone.

Throughout the year, he has been so uniformly and everlastingly fair in his decisions and rulings that he has gained the admiration and love of the unfortunate few who knew him so casually as not to have loved him already.

His two addresses before this Society were at no point faultfinding, but rather factfinding and thought-provoking.

His tasks have been varied and difficult, and to them he has given the full measure of his physical strength, his intellect, and of his devotion. He has shown us the way, and has led us wisely. He has made but few direct recommendations—none that cannot be carried out by his admonition to keep on with chin up and eyes front.

For a year of wise and devoted leadership, we are both grateful and deeply appreciative. Our Society is a year older than when President Rousseau assumed the rewards and responsibilities of leadership, and many, many years further advanced in the humanities and in all other attributes which make an organization great.

For the privilege of serving with him and under this good man, this Committee is grateful.

W. M. Coppridge, Chairman
J. Street Brewer
Benjamin F. Royal

I move the adoption of the report.

[The motion was seconded by Dr. Beddingfield, was put to a vote and carried.]

Speaker Murphy: We want to come back to one item of business, and that is the biennial registration, which is not a part of the By-Laws. It was an action of the House, and a motion to rescind is in order if you want to bring it up.

Dr. Wolfe: I don't want to rescind it at all.

Speaker Murphy: This is the time and place to discuss it.

Dr. Wolfe: I wanted to clarify it, because there was such a state of confusion at the time.

I think it would be a good idea, while I am on my feet, to provide that, in the future, any revision of the By-Laws or the Constitution ought to be printed so that the men may look at it before action is taken. You take a bunch of fellows that

have been sitting for four or five hours, and somebody gets up and starts to read, and you may have a copy before you, and then the first thing you know he is reading revisions in there that is not even in your copy and you don't know anything about it. I think it would be a good thing to let them know about it ahead of time.

Dr. McMillan: That is taken care of in here for the future, Dr. Wolfe.

Speaker Murphy: The motion was passed that the Legislative Committee be instructed to prepare an amendment to the Medical Practice Act to be presented to the Legislature which would provide for biennial registration at a registration fee not to exceed \$5. Exactly what that amendment would be, we don't know yet, but at the present sitting—and there is no reason to assume it would be different—the only agency that can take your license away from you is the State Board of Medical Examiners, and there is no reason to think that they would want to take a man's license from him because he failed to pay that fee, because he overlooked paying that fee.

Is there any new business?

Dr. Hill: Dr. Coppridge brought to my mind that I had a letter from London, England, from a man inquiring about a man by the name of Milo Miles, born in North Carolina, who died in Henderson County, Tennessee. He was born in 1798, and he weighed at the time of his death over 1000 pounds. He was the biggest man that was ever born in the world. He wanted some information about him if we could get it. He died in 1857 in Henderson

County, Tennessee. He has got pretty good records on the man, but if we could get anything from anybody in the western part of North Carolina about this man, it would be appreciated.

The Historical Society has nothing on him. If any of you in the western part of North Carolina have anything, please let me know.

Speaker Murphy: Is there any further business? Incidentally, they say that Carl Gersch had an article on him. Maybe Carl has some information on him.

Dr. Blackmon: We adopted the financial report the other night, saying that it had been audited and all that, but I think none of us have ever seen that report. We have not taken time to look at it. I wonder if next year we could not have a balance sheet, just one page, not a complete report, incorporated in this literature that is sent out.

Mr. Barnes: There is a summary sheet which is very short and we would be glad to include it in the annual compilation if you say to do it.

Speaker Murphy: Are you making a motion that this summary sheet be published?

Dr. Blackmon: I am.

[The motion was seconded by several.]

[The motion was put to a vote and carried.]

Speaker Murphy: Is there any further business before we adjourn? If not, a motion to adjourn will be entertained.

[Upon motion regularly made and seconded, it was voted to adjourn at three-twenty o'clock.]

GENERAL SESSIONS

TUESDAY MORNING SESSION

May 1, 1956

The First General Session held in connection with the 102 Annual Session of the Medical Society of the State of North Carolina met in the Ballroom of The Carolina, Pinehurst, North Carolina, at nine thirty-five o'clock, and was called to order by Dr. Millard D. Hill, Chairman of the Committee on Arrangements.

President James P. Rousseau convened the Session and extended a welcome. He introduced Reverend Adam W. Craig of the Pinehurst Episcopal Church who rendered the invocation.

Secretary Hill (as Vice President of the American Medical Association) recognized distinguished guests.

Dr. Roland T. Bellows, Chairman of the Committee on Scientific Awards, was recognized and he evaluated the primary awards offered as follows:

The Moore County Medal

The Wake County Cooper Medal

The Gaston County Audio-Visual Award

The Moore County Medal was awarded to Dr. A. Hughes Bryan of Chapel Hill for his paper, "Obesity and the Public Health."

Dr. Bellows recognized Dr. William Doshier as a member of the Committee on Awards who presented the Wake County Cooper Medal to Doctors Dirk Verhoeff and William M. Peck for their paper, "The Trends in Management of Tuberculosis in Children."

Dr. Bellows presented the Gaston County Award to Dr. Cabell Young of Winston-Salem for his motion picture, "Congenital Dislocation of the Hip." The picture was shown.

[Vice President Edward Schoenheit assumed the Chair.]

Dr. Nathan Womack of Chapel Hill was introduced and he presented a paper, "Cancer of the Colon."

Dr. G. Westbrook Murphy was presented for an address of personal privilege, entitled, "A Small Leak Will Sink a Great Ship."

Dr. Denton A. Cooley, Cardiovascular Surgeon of the Methodist Hospital, Houston, Texas, was introduced by Dr. G. W. Murphy and presented a paper, "Surgical Treatment of Aneurysms and Occlusive Arterial Disease," which was illustrated with slides.

[President Rousseau resumed the Chair.]

President Rousseau introduced Dr. Elmer Hess, President of the American Medical Association, who spoke to the convention on the subject, "The Physician as a Citizen."

[Vice President Milton S. Clark assumed the Chair.]

Dr. Clark introduced Dr. Warren Furey of Chicago who read an address on the subject, "Blue Cross—Blue Shield."

Dr. Clark introduced Dr. David B. Allman, president-elect of the American Medical Association who addressed the Convention on the subject, "Medicine in a Changing World."

Chairman Clark: We now come to the address of our President, and it is my privilege and my pleasure to present him. I do want to take just a moment to tell you that those of us who have worked with him throughout the past year have learned to love him, to admire and appreciate him perhaps more than some who have not been quite so closely associated with him. It has been a real inspiration to observe his thinking and his operations under duress, and I must say at this point that he has operated under duress throughout most of his term. Everything that he has done has been in the interest of our Society and in the interest of medicine in general. It has been truly inspirational, and I am sure that he will go down in the history of our Society as one of our greatest presidents. I present our beloved James P. Rousseau.

[The audience arose and applauded.]

Dr. Rousseau: Thank you very much, Dr. Clark, Dr. Hill, Members of the Association, Ladies and Gentlemen, and Distinguished Guests—and we have many distinguished guests here today: I wish there were time to recognize all of our guests again.

[Dr. Rousseau read his address which is marked "D".] [Applause] [The address has been published since delivery in N. C. Medical Journal]

Chairman Clark: Dr. Rousseau, our appreciation of you is best expressed by the reaction of our membership to your address and also their co-operation throughout your year of office.

Announcements were made by Secretary M. D. Hill.

Dr. Clark recognized Dr. Roy C. Mitchell of Mount Airy.

Dr. Roy C. Mitchell: Mr. Chairman, Members of the State Medical Society, and Distinguished Guests: As some of you are aware, there has been conducted this year an essay contest in the high schools of the State on the subject of "The Advantages of Private Medical Care." These papers were graded by a committee, and in just a few moments there will be presented to you the winning essay. This essay will also be forwarded to the national contest on this subject.

Now, just a few words about the essayist which you should know. Miss Shirley Wilds is the daughter of Mr. and Mrs. Walter Wilds, of Mars Hill, North Carolina. As a freshman in high school, she was elected Football Queen by the student body. During her sophomore year, she was elected Class President and reporter on the school newspaper staff. As a sophomore, she received the Home Economic Award as the school's most promising future homemaker. In her third year of high school, Miss Wilds served as Assistant Editor of "The Wildcat," the school newspaper. She was chosen to serve as Chief Marshal at the commencement exercises at the end of the year.

As a senior, Miss Wilds has received a number of honors. She was elected editor of the Western Carolina College Editor's Roundtable, which is sponsored by The Asheville Citizen. She is editor of "The Wildcat," the high school yearbook.

Throughout her high school years, Miss Wilds has participated in many of the regular clubs of the school. She has served on the Student Council for two years. She is a present member of the Glee Club and has belonged to the 4-H Club. Her scholastic achievement has entitled her to membership in the Beta Club for the past three years. She is to be co-valedictorian of her class with an average of 95.03.

I am glad this loveliness is not in the form of

reports; it is with us in the flesh, and is now ready to address you. [Applause]

[Miss Wilds then read the address which is marked "E".] [Applause]

[The First General Session adjourned at one-thirty o'clock.]

BANQUET SESSION

The Banquet Session was convened by Dr. Fred K. Garvey at 7:00 o'clock on the evening of Tuesday, May 1, 1956, in the Main Dining Room of the Carolina Hotel, Pinehurst, N. C.

Invocation was rendered by the Reverend Thomas A. Fraser, Jr., Rector, St. Paul's Episcopal Church of Winston-Salem.

Dr. Garvey recognized the distinguished guests including Dr. Joseph J. Combs, President of the State Medical Examiner Boards of the United States.

Dr. Fred C. Hubbard presented the President's Jewel to retiring president, James Parks Rousseau, M.D., of Winston-Salem.

Assuming the Chair, President James P. Rousseau administered the Oath of Office and installed the incoming president as follows:

Inauguration and Administration of Oath of Office to Dr. Donald B. Koonce, as President of the Medical Society of the State of North Carolina

Fellow members, ladies and gentlemen, distinguished guests and good friends. From the remarks you have just heard from our toastmaster, I am sure you realize that my selection of Fred Garvey for this task was not just a happenstance. My choice of him was deliberate as I wanted to be certain that the Master of Ceremonies would say something kind about me in this event, which is one of the highlights of my life.

There are those who still feel that success of any venture can be foretold and measured by the qualities of the individual who guides and directs its destiny. Among these qualities, most men will agree, must be ambition, foresight, ingenuity and the capacity to work. Although fate may at times take a hand, the aforementioned attributes of character must be possessed in large measure by him who will pilot an undertaking to successful conclusion. The life of our new President of the Medical Society of the State of North Carolina demonstrates them in almost immeasurable abundance. The following are a few of his outstanding achievements:

Donald Brock Koonce

He received his early education in the Public Schools in Wilmington, N. C.

An A. B. University of North Carolina, 1925
His M.D. University of Pennsylvania, 1929

Fellow of American College of Surgeons

Diplomate, American Board of Surgery

Fellow of Southeastern Surgical Congress

Third District Councilor and Member of

Executive Committee of North Carolina

State Medical Society—1946-1955

Chairman, Public Relations Committee, 1947-

1955, N. C. State Medical Society

Chairman, Cancer Committee, 1954-to date.

Chairman, Board of Directors, North Carolina Division, American Cancer Society, 1955

Donald B. Koonce lives in Wilmington, North Carolina, the locale of his birth and early education. He is a successful surgeon, a leader in medical and civic affairs and enjoys the love, respect

and esteem of his patients and colleagues. When his busy schedule allows, he can be found at his summer cottage in Wrightsville Beach enjoying the view and breeze of the Atlantic Ocean and the companionship of his wife, his family and friends.

Truly this is a record of an ambitious man whose love and devotion to the medical profession, his patients and the Society, thoroughly qualify him as one on whom the Medical Society of the State of North Carolina can depend for success during the coming year. Those of us who have been privileged to know and observe Dr. Koonce's keen intellect, interest, loyalty and untiring efforts to promote the welfare of the Medical Society are confident that the affairs of the Society will enjoy responsible leadership during his able guidance. In the past year he has given me loyal support, sound advice and much of his time. It is my special privilege, honor, and happy duty to administer the oath of office to President, Donald B. Koonce.

Dr. Koonce, please raise your right hand and repeat after me: "I, Donald B. Koonce, solemnly swear that I shall carry on the duties of the office of President of the Medical Society of North Carolina to the best of my ability. I shall strive constantly to maintain the ethics of the medical profession and to promote the public health and welfare. I shall dedicate myself and my office to improving the health standards of the American people and to the task of bringing increasingly improved medical care within the reach of every citizen. I shall uphold the Constitution of the United States and the Constitution and By-Laws of the Medical Society of the State of North Carolina at all times. I shall champion the cause of freedom in medical practice and freedom for all my fellow Americans. I do solemnly swear that I will discharge the duties of office to the best of my ability, so help me, God."

Donald, it gives me a great deal of pleasure to present this gavel to you. I am confident that you will use it well in the performance of the duties and demanding responsibilities accompanying the Presidency of the Medical Society of the State of North Carolina.

Congratulations and best wishes to you and the Society.

WEDNESDAY MORNING SESSION

May 2, 1956

The Second General Session convened at nine o'clock, President Dr. Donald B. Koonce presiding.

Chairman Koonce: Ladies and gentlemen, we will convene the Second General Session. We will try to run this meeting on time. We have a lot of work to do, and it is with great pleasure that I turn the meeting over to our Vice President, Dr. Edward W. Schoenheit.

[Dr. Schoenheit assumed the Chair.]

Chairman Schoenheit: Ladies and Gentlemen: We have a long program and unless we stick to the schedule we won't get through. I will thank you if you will limit your talks to twenty minutes.

The first item on the program is "The New Medical Examiner Law," by Dr. Kenneth M. Brinkhous, Professor of Pathology, University of North Carolina Medical School, Chapel Hill. This paper is from the Section on Pathology.

[Dr. Brinkhous read his paper which is marked "F".] [Applause]

Dr. Schoenheit introduced Dr. Kerr L. White of Chapel Hill who presented a paper, "Teaching and Service Function."

Dr. Schoenheit introduced Dr. Ralph O. Rychener of Memphis, Chairman of the Optometric Rela-

tions Committee of the AMA Section on Ophthalmology, who spoke on "The Motivation of a Physician."

Dr. Schoenheit introduced Dr. George F. Lull, Secretary and General Manager of the American Medical Association who addressed the Convention on the subject, "Problems Facing Medicine Today."

Dr. Robert A. Kehoe, Professor of Industrial Health, University of Cincinnati College of Medicine was introduced and he spoke on "Occupational Health and the General Practice."

Dr. Wesley Bourne, Professor of Anesthesia, McGill University, Montreal, was introduced and presented the subject "Anesthesia Evolving."

Dr. Schoenheit introduced Dr. W. Edward Chamberlain of Temple University School of Medicine, who presented an address: "The Natural History of Intervertebral Disc Disease." (Slides were used to illustrate the presentation.)

CONJOINT SESSION

Chairman Schoenheit: It is time now for the Conjoint Session of the North Carolina State Board of Health with the Medical Society of the State of North Carolina. At this time I will declare the Second General Session of the Medical Society of the State of North Carolina adjourned, and it will be immediately reconvened by Dr. Dixon for the Conjoint Session.

[The Session adjourned at eleven fifty-five o'clock.]

[Dr. G. Grady Dixon, President of the N. C. State Board of Health, assumed the Chair.]

Chairman Dixon introduced the members of the State Board of Health and presented Dr. J. W. Roy Norton, Secretary and State Health Officer, who presented the annual report of the State Board of Health.

RECONVENING SECOND GENERAL SESSION

The session reconvened at twelve twenty-five o'clock on adjournment of the Conjoint Session, Dr. Milton S. Clark, Second Vice President, presiding.

Chairman Clark: The Second General Session is reconvened for two purposes, namely, the election of seven members to our State Board of Medical Examiners, and also for the award of prizes. There will be some other elections, too.

On the Board of Trustees of the North Carolina Hospital Saving Association, the term of John S. Rhodes expires on June 30, 1956. Are there nominations?

Dr. Hill: Dr. Rhodes is a member of my County Medical Society. I would like to move that he be elected to succeed himself.

[The motion was seconded by several.]

Chairman Clark: It has been moved and seconded that Dr. Rhodes' name be put in nomination. Are there any nominations from the floor?

Dr. Crump: I move that nominations be closed and that he be elected unanimously.

[The motion was seconded by several.]

[The motion was put to a vote and carried.]

Chairman Clark: He is unanimously elected.

Then we have for the Editorial Board of the North Carolina Medical Journal terms expiring as follows: Dr. Ernest Furgurson, May, 1956; Dr. G. W. Murphy, also May, 1956; Dr. Wingate Johnson, May, 1956.

Dr. Richardson: I should like to nominate to succeed themselves Dr. Ernest Furgurson, Dr. Wingate Johnson, and Dr. Westbrook Murphy.

[The nominations were seconded by Dr. Paschal.]

Chairman Clark: Are there any nominations from the floor?

Dr. Dixon: I move that nominations be closed and that their election be unanimous.

[The motion was seconded by several, was put to a vote and carried, unanimously.]

Chairman Clark: We have quite a major problem. We have the election of seven members of our North Carolina Board of Medical Examiners for a term of six years each. I know you have all given due thought to this, and in order to be fair to everyone concerned and to expedite this in the least time possible, I have a procedure which I would like to present.

Firstly, any active member of the Medical Society of the State of North Carolina, without regard to place of residence or office held, including the present State Board, is eligible for election, and I would like to read Section 1 of our Constitution for clarification:

The seven members of the Board of Medical Examiners of the State of North Carolina shall be elected by ballot in General Session for a term of six years, a majority of the votes cast being necessary to a choice. The election shall be held on the second day of the Annual Meeting and the balloting shall continue until the entire number is elected.

And now to clarify "majority," permit me again to read a definition from the authority, the dictionary, Funk & Wagnalls' new College Standard Dictionary:

Majority: One more than half of a given number or group; the greater. (2) The amount or number by which one group of things exceeds another group; excess. (3) The age at which the laws of a country permit a person to manage his or her own affairs—in most of the United States, the age of 21. (4) The rank or commission of a Major. (5) In American politics, more than half of the people, more than half of the votes cast. (6) The number of votes cast for a candidate over and above the number cast for his nearest opponent; a plurality. (7) The party having the most power in a legislature.

I would like to emphasize the number of votes cast for a candidate over and above the number cast for his nearest opponent. In the event that more than seven men receive the majority of votes cast in any one ballot, then the first seven in the order of their superiority will be declared elected.

Now, with your permission, I should like to appoint Tellers from each District. From the First District is Dr. William A. Hoggard, Jr. Present? Will you agree to serve from the First District? [Agreed]

From the Second District, Dr. Rachel Davis. Would you please serve as a Teller from your District? [Agreed]

From the Third District, Dr. Glenn C. Newman; will you please serve? [Agreed]

From the Fourth District, Dr. C. F. Strosnider? [Not present.] Dr. Henderson Irwin, will you please serve in that capacity? [Agreed]

From the Fifth District, Dr. William Hollister? [Not present.] Dr. Ralph Garrison, will you serve in that capacity? [Agreed]

From the Sixth District, Dr. George Paschal; will you please serve? [Agreed]

From the Seventh District, Dr. Edward Bivens, will you serve? [Agreed] Thank you!

From the Eighth District, Dr. Norris Smith, will you serve in that capacity? [Agreed]

From the Ninth District, Dr. Bill Long, will you please serve as Teller for your District? [Agreed]

From the Tenth District, Dr. J. F. McGowan, will you please serve? [Agreed]

The duty of the Tellers from each district is to collect the ballots from the members of the district, tabulate same on a score sheet to be provided, which will be presented together with all ballots cast to our Secretary, Mr. James T. Barnes. We will have a blackboard upon which the names of the nominees, as they are presented, will be written, so that all members will know the complete slate of candidates. Nominations are in order.

Dr. Rousseau: Members of the Medical Society, Ladies and Gentlemen: I rise to nominate Dr. Joseph J. Combs. Having served on the Board of Medical Examiners, I am convinced that a complete new Board coming in, as we have been doing in the past, would have increasing difficulties. Many of your past members of the Board of Medical Examiners, many members of this Society, feel that the Board of Medical Examiners of the State of North Carolina is the most important thing in self-regulation and protecting the public and protecting the members of this profession.

I am certain Dr. Combs does not want to serve. I think everyone who has served on this Board would like to get off of it immediately, but in the interest of medicine I would personally like to see two of the old Board members carried over to give the five new members elected the advantage of the knowledge which they have obtained in six years of service, and I think it is most important, and therefore place Dr. Joseph J. Combs' name in nomination.

Chairman Clark: Thank you, Dr. Rousseau. I would like further, in order to expedite this, to make a few more remarks on procedure. I hope you will bear with me. In the interest of time, I believe that most of you can confine your remarks to two minutes. Shall we limit the nominating speeches to two minutes and shall we time them? I will ask someone to time us. No seconds to nominations are required, and in the interest of time, they are really considered unnecessary.

Remember, only one vote for seven candidates on the first ballot. I would like further to state that I have asked Dr. G. Westbrook Murphy and Dr. John Anderson to be my parliamentary assistants.

Dr. Murphy: Mr. President, there is only one reason why a man should wish to serve on the Board of Medical Examiners, and that is that he has a compelling desire to be of service to his day and generation and to do something constructive for the people and his profession. The honor accruing from the office is minor. The time required is tremendous. The sacrifice exceeds your belief, physical, mental and financial.

A year and a half ago, I was elected to replace Dr. Rousseau on the Board, and I wish to say to you that at that time I had no concept of what was involved. Even now, after a year and a half, I find myself largely at a loss in trying to find my way through the ramifications of the duties of those seven men over and above the ordinary duties of a native-born American citizen. One is the narcotic problem. The second is that of the relationship with the other boards in the United States. Incidentally, I say to you that our State Board is the only one in the United States that is selected by the Medical Society. But the most harassing problem of all is that of the underprivileged and often poorly-educated foreign graduates who are seeking to practice in our State. The pressure from many sources—political, professional and otherwise—to license these people is unbelievable.

I understand I have ten seconds left, and I will say that in order to try to preserve the continuity

of these functions, I would like to recommend a sacrificial lamb, Dr. L. R. Doffermeyre, now a member of the old Board. [Applause]

Dr. Schoenheit: Mr. Chairman, I wish to nominate for the Board of Medical Examiners Dr. John B. Anderson, of Asheville. Dr. Anderson is a graduate of the University of Maryland. He is one of our leading surgeons. He is a Fellow of the American College of Surgeons. He has served as Chief of Staff at the Aston Park Hospital. He is now attending surgeon at the Mission Memorial Hospital. He is a Past President of the Buncombe County Medical Society and has been endorsed by that Society. He is now President of the Tenth District Medical Society. He served overseas in the Naval Service in World War II. Always generous of his time in civic and community affairs, he served as President of the Optimists Club and also as District Governor. Dr. Anderson is eminently qualified for election to the Board of Medical Examiners.

Chairman Clark: Thank you, Dr. Schoenheit.

Dr. Joe Elliott: Mr. Chairman, Ladies and Gentlemen: I wish to nominate a candidate who fulfills all of the qualifications that Dr. Murphy has so beautifully outlined, namely, Dr. Thomas Baker, of Charlotte. Dr. Baker was born 49 years ago in North Carolina. He received his early education, went to Wake Forest, where he received his literary degree and later received his medical degree from the University of Pennsylvania. He served two years there in the Pennsylvania Hospital, later going to the Mayo Clinic where he spent four years and received his Master of Science degree there. Then he came to Charlotte and has practiced there for the last eighteen years.

Dr. Baker has done an outstanding job. He was recently elected Chief of Staff of our largest hospital. This year he is President of the Mecklenburg Medical Society. He is eminently fitted for this important position, and I hope you will honor him with your vote.

Chairman Clark: Thank you! Dr. Bonner!

Dr. Bonner: I am Bonner from Beaufort County. That is where I am working. I was born and reared in the eastern part of the State, and I have asked for the privilege and pleasure of nominating an old friend of mine from Down East, Ed Rasberry, from Wilson—that is the Fourth District. The Fourth District is unanimously in favor of electing Ed, and I asked Dick Pittman to let me nominate this fellow because I think so much of him.

He is well trained, he is a good internist, and having served on the Board of Medical Examiners myself, I feel that he has the qualifications to make a good member, and I hope he is elected.

Chairman Clark: Thank you, Dr. Bonner, Dr. Long!

Dr. Long: The Ninth District has given me the honor of placing in nomination a man I am very, very proud to present. He is a radiologist, certified by the American Board, a thorough gentleman and a scholar. He has all the qualifications that a man can ask for. I refer to Dr. Thomas G. Thurston, of Salisbury.

Chairman Clark: Thank you!

Dr. Harris: The Rockingham County Medical Society has asked me to come to you with the name of Dr. Carl V. Tyner, of Leaksville, a surgeon, for the Board of Medical Examiners. Dr. Tyner is Past President of the Rockingham County Medical Society. He is Past President of the Eighth District Medical Society. He is a Fellow of the American College of Surgeons. He has been for thirty years a surgeon for the northern and western

part of Rockingham County. He is a Past President of the Board of Trustees of the State School for the Blind and Deaf. He is at the present time a member of the Board of Trustees of Wake Forest College.

It is with a great deal of pride that I present the name of Dr. Tyner for the Board of Medical Examiners.

Dr. R. B. Davison [Greensboro]: In my opinion, the Board of Medical Examiners has as much to do with the future practice in North Carolina as any one or more other bodies, including all the committees in the State Medical Society. I believe we need men on that Board whom you would like to see your grandmother or your grandfather or your wife or your daughter or your grandson, when they are sick, be under their care. I believe that doctors should be doctors at heart first and secondly doctors in their brain.

I have the pleasure of presenting to you such a man from Greensboro, North Carolina, a doctor that is loved and respected by all of the profession in that part of the State.

He is at present President of the Guilford County Medical Society. He has served well in that Society in other offices. He has been President of the Eighth District, and I have the honor of presenting to you as a member of the Board of Medical Examiners Dr. Joseph B. Stevens, of Greensboro, North Carolina.

Chairman Clark: May I interrupt for just a moment? The request has been made that you name the district, but it is really irrelevant since it matters not from which district he comes. It is just a matter of interest.

Dr. Sidbury [New Hanover County]: I am presenting a man who has come from the sticks in practicing medicine up to be a recognized radiologist in the southeastern part of the United States. He has been one of the outstanding men in eastern North Carolina, and I want to present the name of Dr. Graham Barefoot, of Wilmington, North Carolina.

We appreciate very much the services of these seven men in this six-year period, but I just want to call to your attention that there are 3000 other doctors in North Carolina. Thank you!

Chairman Clark: Thank you, Dr. Sidbury! Are there other nominations?

Dr. Bonner: I move that nominations be closed.

[The motion was seconded by several.]

[The motion was put to a vote and carried.]

Chairman Clark: All of the members of the Society are eligible to vote, of course, and I shall ask that the districts assemble under their standards. You will find them around the outside of the curtain and the Tellers will collect the ballots there.

[Intermission for collection of the ballots and tabulating.]

Chairman Clark: May I have your attention, please? It appears that we have elected all seven on the first ballot. There was a total vote of 316 ballots. A majority, therefore, would be 159. The result of the voting was as follows:

(1) Dr. Thomas Baker	— 274
(2) Dr. Joseph Combs	— 269
(3) Dr. L. R. Doffermeyre	— 255
(4) Dr. J. B. Anderson	— 223
(5) Dr. Carl Tyner	— 216
(6) Dr. Tom Thurston	— 213
(7) Dr. Ed Rasberry	— 212

I declare them elected. Will you please go straight to the dining room. They are holding it

open for us. Thank you so much for your indulgence.
The meeting is adjourned.
[The meeting adjourned at one-forty o'clock.]

WEDNESDAY AFTERNOON SESSION

May 2, 1956

The Third General Session convened at five o'clock, President Donald B. Koonce presiding.

President Koonce: Ladies and gentlemen, I would like to convene the Third General Session of the North Carolina Medical Society and I would like to ask Dr. Rousseau if he would come to the stand, please, to present the Fifty Year Certificates. To be presumptuous enough to introduce Dr. Rousseau to you would be rather silly, I think. Anyhow, to me, ladies and gentlemen, this is still President Rousseau. [Applause]

Dr. James P. Rousseau: President Koonce, Members of the Medical Society, Members of this Fifty Year Club, my good friends: It is a special privilege which Dr. Koonce extended to me to welcome you and to extend to you the hearty congratulations and sincere appreciation of a grateful public and the medical profession for your fifty years of unselfish service to your fellow-man. For half a century, you have nobly performed your prime purpose of improving the health of mankind. You have saved lives, relieved suffering, and comforted the sick and his loved ones always.

You have established an enviable record in the practice of medicine—one that few attain—a record of which you should be proud. You have brought honor to our profession and Society. Those of us who have traveled some of the way along this same road are thoroughly aware of the many personal sacrifices you have made. This increases our admiration, respect and esteem for all who have achieved the high honor accompanying membership in the Fifty Year Club. It is an honor richly deserved and earned by you. The exemplary lives you have lived are a challenge to all of us who follow in your footsteps.

It is my sincere hope that the high ideals of true service you have so clearly taught, by precept and example, will be an inspiration and guiding light to all in our profession.

When your names are called, please come forward in order that I may have the honor of presenting you this scroll and token of appreciation from your many friends and colleagues in the Medical Society. I thank, congratulate, and extend to each of you our very best wishes for continued good health, happiness and service to mankind in the years ahead.

[Certificates were presented to the following:]

Ballou, James Larkin, M.D.
Grassy Creek, N. C.
Beall, Louis Girardeau, M.D.
Morganton, N. C.
Carlton, Romulus Lee, M.D.
Winston-Salem, N. C.
Corpening, Oscar J., M.D.
Granite Falls, N. C.
Currie, Daniel Smith, Sr., M.D.
Parkton, N. C.
Fleming, Major Ivy, M.D.
Rocky Mount, N. C.
Ferguson, Robert T., M.D.
Charlotte, N. C.
Grantham, Wilmer Lloyd, M.D.
Asheville, N. C.
Griffith, F. Webb, M.D.
Asheville, N. C.
Hodgin, Henry Hiram, M.D.
Red Springs, N. C.

Hoggard, John Thomas, M.D.
Wilmington, N. C.
Horton, Miles C., M.D.
Pine Bluff, N. C.
Johnson, John B., M.D.
Old Fort, N. C.
King, Robert R., M.D.
Murphy, N. C.
Lane, John Loftin, M.D.
Rocky Mount, N. C.
Long, Vann McKee, M.D.
Winston-Salem, N. C.
McLemore, George A., M.D.
Smithfield, N. C.
McPheeters, Samuel B., M.D.
Goldshoro, N. C.
Newell, Hodge Albert, M.D.
Henderson, N. C.
Peeler, Clarence N., M.D.
Charlotte, N. C.
Peete, Charles Henry, M.D.
Warrenton, N. C.
Rose, Abraham Hewitt, M.D.
Smithfield, N. C.
Tankersley, James William, M.D.
Greensboro, N. C.
Taylor, Maurice L., M.D.
Society Hill, S. C.
Willcox, Jesse Womble, M.D.
Carthage, N. C.

President Koonce: Ladies and gentlemen, the next thing is the report of the House of Delegates. Dr. Millard Hill, our Constitutional Secretary and Treasurer, will report.

Dr. Hill: Dr. Rousseau, Dr. Koonce, and Members of the Third General Session: I wish to report to you the slate of officers nominated by the Nominating Committee and accepted by the Second Session of the House of Delegates of the State Medical Society:

President-Elect—Dr. Edward W. Schoenheit, Asheville, N. C.

First Vice President—Dr. John H. Rhodes, Raleigh, N. C.

Second Vice President—Dr. O. Norris Smith, Greensboro, N. C.

Speaker of the House—Dr. G. Westbrook Murphy, Asheville, N. C.

Vice Speaker of the House of Delegates—Dr. Lenox D. Baker, Durham, N. C.

Vice Councilor to fill the vacancy created by the resignation of the Vice Councilor of District 2—Dr. William Bell, New Bern, N. C.

The meeting place for 1957, first choice, The Carolina, Pinehurst, second choice, Asheville.

Mr. President, I move that this slate of officers, as presented by the Nominating Committee and accepted by the House of Delegates, be accepted by the General Session.

President Koonce: Do I hear a second to this motion?

[The motion was seconded by several.]

President Koonce: The motion has been made and seconded. If there is no discussion, all those in favor let it be known by saying "aye"; those opposed, "no." It is so ordered.

The next item is Unfinished Business. Is there any unfinished business to come before this Third General Session?

Is there any new business?

If not, it becomes my very pleasant job to introduce to you and to install our new officers. Theoretically, as a courtesy shown to them, they are to be escorted to the rostrum. I am going to ask Dr. Edward Schoenheit if he will come. [Ap-

plause] Ladies and gentlemen, our new President-Elect, Dr. Edward Schoenheit, of Asheville.

Dr. Schoenheit: Mr. President, Ladies and Gentlemen: This is certainly the greatest honor that I have ever had in my life and one that I never even dared dream might come true. Although I have attended the Society meetings for a good many years, I served in office for the first time last year as First Vice President. During my tenure of office, I had the opportunity to serve on the Executive Council. While serving on the Executive Council, I made many warm friends, and I began to feel a little bit of regret at the latter part of the year that my term of office was coming to a close and that I probably would not be on the Council any more. Now you have given me the opportunity to see and be with these splendid people for some time in the future. If and when I take office next year, if I could feel that I could do only half as well as Dr. Rousseau has done this year, I would feel that I had done a good job.

I believe that is about all I have to say at this time, but I do want to thank you for this office and I hope that I will meet your expectations. If I do not do a good job, I hope it may never be said that I did not try. Thank you! [Applause]

President Koonce: Now it is my very pleasant duty to introduce to you and ask to come to the rostrum my and your First Vice President, Dr. John S. Rhodes, from Raleigh. [Applause]

Dr. Rhodes: Mr. President and Friends: My gratitude for this honor is exceeded only by a deep sense of responsibility. The prospect of serving this Society with my admired and es-

teemed friend, Donald Koonce, gives me a great deal of satisfaction. I pray that I may merit the confidence of my fellow-doctors. Thank you! [Applause]

President Koonce: The next officer is Dr. O. Norris Smith, Second Vice President, from Greensboro.

The Speaker of the House of Delegates, Dr. G. Westbrook Murphy, who needs no introduction to anybody connected with the State Medical Society. The Vice Speaker of the House of Delegates, Dr. Lenox Baker, who is in the same category. The Vice Councilor of the Second District, Dr. William Bell, who succeeds Dr. Simmons Patterson.

Now comes the unpleasant part of my duty, and that is the remarks, and I assure you they will be brief. Before we adjourn this Third General Session of the Medical Society of the State of North Carolina I have one simple statement that I would like to make, and that is, I feel that in the action that has been taken in the past three days by the House of Delegates and the General Assembly there has been more confidence placed in the executive group than I have ever known before, and I have been in the executive group for some time. Even with the danger of making this a mutual admiration society, I want to say that I think most of this is due to Dr. Rousseau, our retiring President, and it is with that thought that I would like to adjourn this meeting of the State Medical Society sine die.

[The meeting adjourned sine die at five-thirty o'clock]

1956

TRANSACTIONS

OF THE

AUXILIARY TO THE MEDICAL SOCIETY

OF THE STATE OF NORTH CAROLINA

THIRTY-THIRD ANNUAL MEETING

held at

PINEHURST, NORTH CAROLINA

APRIL 29-30, and MAY 1, 1956

President, Mrs. R. D. Croom, Maxton
 Recording Secretary, Mrs. R. L. Garrard, Greensboro
 Treasurer, Mrs. J. M. Hitch, Raleigh

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TRANSACTIONS OF THE AUXILIARY

AUXILIARY TO THE MEDICAL SOCIETY TO THE STATE OF NORTH CAROLINA

Memorial Service

The Memorial Service for deceased members was held in the Ball Room of the Carolina Hotel on Sunday evening, April 29, 1956 at 8:00 P. M. These services were held in conjunction with the Medical Society. Dr. Charles H. Pugh read the list of Medical Society members deceased since the last meeting in May, 1955. Mrs. C. T. Grier, Chairman of Memorials for the Auxiliary, read the list of deceased Auxiliary members as follows:

Mrs. E. Bruce Beasley, Fountain
Mrs. Glenn E. Best, Clinton
Mrs. Agnes Blount, Farmville
Mrs. L. D. Bryan, Snead's Ferry
Mrs. Andrew L. Chesson, Raleigh
Mrs. William M. Fowlkes, Wendell
Mrs. Jasper S. Hunt, Charlotte
Mrs. William S. Jordan, Fayetteville
Mrs. David S. Morrill, Farmville
Mrs. J. R. Murnan, Charlotte
Mrs. Hortense Moye, Greenville
Mrs. David J. Rose, Goldsboro
Mrs. Carl V. Reynolds, Asheville
Mrs. Henry Simpson, Elon College
Mrs. Estus White, Kannapolis
Mrs. Albert G. Woodward, Goldsboro

A beautiful flower arrangement of calla lilies and white stock was placed on the platform, with one calla lily in memory of each deceased member. Mrs. Grier offered a brief prayer for their eternal rest.

The Choir from Flora McDonald College, under the direction of Mr. Lawrence Skinner presented a beautiful program of sacred music, and a memorial address was delivered by Dr. C. Excell Rozzell, Professor of Religious Education at High Point College. A Choral Postlude by the Choir and Benediction by Dr. Rozzell concluded the Services.

Mrs. Robert L. Garrard

Recording Secretary

Approved: Mrs. R. D. Croom, Jr., President

Date: June 8, 1956

AUXILIARY TO THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

Meeting Of Executive Committee

The Annual Meeting of the Executive Committee of the Woman's Auxiliary to the Medical Society to the State of North Carolina was held on Monday, April 30, 1956 in the Dutch Room of the Carolina Hotel at 11:30 A.M. Mrs. R. D. Croom, Jr. President, was in the Chair. Present for the meeting were: Mrs. Harvey May, President-Elect, Mrs. P. G. Fox, First Vice-President, Mrs. W. P. Richardson, Second Vice-President, Mrs. J. M. Hitch, Treasurer, and Mrs. R. L. Garrard, Recording Secretary.

First on the Agenda was a recommendation which had been presented by the Finance Committee, Mrs. J. M. Hitch, Chairman, discussed and tabled, the motion having been made and seconded, at the Fall Board Meeting in Chapel Hill, September, 1955. This motion concerned the presentation of a pin to the president and past presidents as a token of appreciation for their services. A recommendation was made that this motion be amended to read "That the Auxiliary bestow upon the President and Past President a gift, preferably a pin, or a donation to an Auxiliary project as a token of appreciation."

The next item on the Agenda was a constitutional amendment concerning membership. A recommendation was made that the Chairman of Revisions be given authority to restate Article III, Section I on Membership in accordance with instructions from the Advisory Committee of the Medical Society of the State of North Carolina.

Mrs. Croom then made a recommendation that the History of the Auxiliary to the Medical Society to the State of North Carolina be brought up to date. She stated that this is the 33rd year of the Auxiliary and she wished to have prepared a booklet to be ready for the celebration of the 35th Anniversary of the Auxiliary. She emphasized that this will be a lasting memory to old members and a useful source of reference to newer members. She suggested that this work be started without delay and will be a project for the Historian and her committee. These recommendations were approved.

The President mentioned great volumes of correspondence she had received concerning the work of the auxiliary, many of the letters were the expression of thanks. In the interest of time, it was decided to make the necessary announcements instead of reading the entire communications, leaving the letters themselves on file.

The Executive Committee also agreed that Certificates of Honorary Membership should be presented to the two honorary members voted at the Fall Board Meeting after approval of these memberships by the House of Delegates. Mrs. P. P. McCain and Mrs. Frederick R. Taylor would become the Auxiliary's first Honorary Members.

Mrs. Betty W. Stoffel who wrote the beautiful poem "Prayer for our Doctors" published in the 1955-56 Auxiliary Year Book was to be an invitee at the meeting of the House of Delegates. Mrs. Croom suggested that she be asked to close the meeting with the reading of her Prayer.

There being no further business before the Executive Committee, the meeting was adjourned by the President at 12:30 P. M.

Respectfully submitted

Mrs. Robert L. Garrard

Recording Secretary

Approved: Mrs. R. D. Croom, Jr., President

Date: June 8, 1956

EXECUTIVE BOARD

The Executive Board of the Auxiliary of the Medical Society to the State of North Carolina met on April 30, 1956 at 2:30 P. M. in the Village Chapel in Pinehurst. The meeting was called to order by Mrs. R. D. Croom, Jr., President. The invocation was given by Mrs. C. T. Grier, and Mrs. Croom extended greetings to all.

Mrs. Powell G. Fox moved that the roll call and the reading of the Minutes be omitted, inasmuch as these appear in the Auxiliary News and the Medical Journal. The motion was seconded by Mrs. Roscoe McMillan and was carried.

Announcements were made concerning further Convention activities.

Mrs. Croom introduced the Officers of the Auxiliary to the Medical Society of the State of North Carolina. She requested the reports of the Officers and the Committee Chairmen. Since most of the reports appear in the Bulletin of Annual Report only officers and chairmen with additional information were asked to report, although all were recognized.

Mrs. P. G. Fox, First Vice-President reported that she had had splendid cooperation from the Councilors and commended them for their work. She announced that as of the time of the Meeting, the Auxiliary had 2024 members, topping the two thousand mark for the first time in the history of the Auxiliary. She also stated that there were 44 members-at-large, of which 23 were new. She urged continued efforts on the part of the Councilors to organize unorganized districts and to obtain additional memberships. She introduced the seven Councilors present.

Mrs. W. P. Richardson, Second Vice-President reported on the Sanatoria Beds and the Student Loan Fund. She read the report as printed in the Annual Report, but showed the latest financial figures and announced the newest guests in the Sanatoria beds. She introduced the two Bed Chairmen who were present: Mrs. R. A. Matheson, McCain Bed and Mrs. Eugene C. Clayton, Stevens Bed. Mrs. Roscoe McMillan, Chairman of the Student Loan Fund was introduced, and she gave a brief resume of the excellent use to which the Student Loan Fund had been put, and conveyed the thanks of the three recipients, all of whom are senior medical students. She commended the splendid work of the Treasurer in the handling of these funds and expressed pleasure at the revisions in the By-Laws which make it possible to put the Student Loan Fund to use.

Mrs. Croom introduced the three past-presidents attending the meeting: Mrs. P. G. Fox, Mrs. G. M. Billings and Mrs. Roscoe McMillan. Mrs. Reece Berryhill was entertaining the Convention Guest of Honor, Mrs. Paul C. Craig, First Vice-President of the Auxiliary to the American Medical Association.

In introducing the Treasurer, Mrs. J. M. Hitch, Mrs. Croom also commended her on her outstanding stewardship. Mrs. Hitch then gave her report in detail, a copy of which is filed with these Minutes. Mrs. Hitch mentioned that since the opening of the Annual Meeting, numerous members had paid their dues, and her figures would need revision before closing of the books on June 30, and stated that as of that moment she had dues from 2037 members, an increase of 90 over the last year, and several more were expected.

Mrs. Croom had to leave the meeting at that time, to present her Annual Report to the House of Delegates of the Medical Society of the State of North Carolina. During her absence the Chair was taken by Mrs. P. G. Fox, first Vice-President.

Mrs. Hitch continued by reading the proposed Budget for the year 1956-57, based upon an estimated 1925 members. A copy of this Budget is also filed with these Minutes. Mrs. Hitch moved that her Report and estimated Budget be accepted. It was seconded by Mrs. W. P. Richardson. Considerable discussion followed concerning one item, the dues to be paid to the N. C. Woman's Council. Mrs. J. T. Wilkinson explained that the annual dues which were formerly \$5.00 were now \$25.00, but his now included the registration fee to the Workshop for five Auxiliary members. It was considered advisable that the Auxiliary maintain its membership in the N. C. Woman's Council and Mrs. Wilkinson moved that the Budget be amended to include \$25.00 for these dues. The motion was seconded by Mrs. Roscoe McMillan. Mrs. Hitch explained that this fee could be covered by basing the estimated receipts from dues upon a 1945 membership instead of 1925. The motion was then carried. Mrs. McMillan recommended that a dele-

gate to the N. C. Woman's Council be appointed. There is a Chairman already, but the Council has requested two representatives and two alternates. The President-Elect is to appoint such a delegate. Before relinquishing the floor, the Treasurer requested that all expense accounts be submitted promptly so that these can be paid before she closes her books at the end of June.

Mrs. J. T. Littlejohn reported on the American Medical Education Foundation, and her report is included in the Annual Report. Mrs. George Paschal, out-going Chairman of Auxiliary News announced that Mrs. Jayne Joyner of Chapel Hill will be the new Auxiliary News Chairman, and she urged continued cooperation and news items. The next deadline for the News will be June 30. She moved that some official recognition be given to the Hospital Saving Association for their fine cooperation in publishing the Auxiliary News. This was seconded by Mrs. A. R. Cross and the motion was carried.

Mrs. J. F. Reinhardt, Chairman of Bulletin, urged that all members subscribe to the Bulletin, and she explained that news material was NOT to be sent to her for publication, since the Bulletin is published by the A. M. A. Auxiliary, and any news items sent to her had to be forwarded to Auxiliary News.

Mrs. Quintain Cooke, Chairman of Doctor's Day announced that she was most gratified by the Doctor's Day reports she had received. She read her report, a copy of which is filed with these Minutes.

Mrs. C. T. Grier, Chairman of Memorials, announced that sixteen members were reported deceased during the past year, and read the names as follows: Mrs. E. Bruce Beasley, Mrs. Glenn E. Best, Mrs. Agnes Blount, Mrs. L. D. Bryan, Mrs. Andrew L. Chesson, Mrs. William M. Fowlkes, Mrs. Jasper S. Hunt, Mrs. William S. Jordan, Mrs. David S. Morrill, Mrs. J. R. Murnan, Mrs. Hortense Moye, Mrs. David J. Rose, Mrs. Carl V. Reynolds, Mrs. Henry Simpson, Mrs. Estus White and Mrs. Albert G. Woodward.

At this point, Mrs. Croom returned to the room and resumed the Chair. Reports were continued.

Mrs. Ben Royal, Chairman of Nominations announced that she would keep the Executive Board in suspense until tomorrow, making her report at the General Meeting. Mrs. J. D. Stratton, Chairman of Family Life Council was unable to be present, and Mrs. Wilkinson gave a brief resume of activities. Mrs. K. M. Brinkhouse had also attended the Family Life Conference, held in Durham last November.

Mrs. A. R. Cross, Chairman of Nurse Recruitment announced that her report was in the Annual Report, but added that for the time being no Auxiliary Nursing Scholarship would be established since the Student Loan Fund was being expanded for greater use. She stressed that Nurse Recruitment should include recruitment in other medical fields such as technicians, secretaries, medical record librarians, etc. Mrs. Croom stated that significant progress had been made.

Mrs. R. W. King, Program Chairman, stated that her report was also in the Annual Report but requested a brief conference with County Presidents regarding programs. Mrs. W. H. Romm, Chairman of Radio and Movies, stated that a great increase was made over last year with a total of 31 counties reporting on the use of Radio and Movies. She urged that all reports be sent in on time.

Mrs. R. L. Garrard, Chairman of Revisions, reported that the rewording, simplification and clari-

fication of the By-Laws had been continued. Previous Revisions were approved at the Fall Board Meeting and published in the Auxiliary News. Two additional revisions were proposed: (1) that Article III—Membership, Section 2 (b) be amended to read "life member" instead of honorary member. This is in accordance with the By-Laws of the State Medical Society, and Mrs. Roscoe McMillan moved that we conform with it. Mrs. Wilkinson seconded the motion, and it was carried. Mrs. Harvey May moved that the Chairman of Revisions be given authority to restate Article III, Membership, Section 1, in accordance with instructions from the Advisory Committee of the Medical Society of the State of North Carolina. This motion was seconded by Mrs. Wilkinson. For the benefit of the Executive Board it was explained that this recommendation was made to authorize the Revisions Chairman to place limitations on membership in accordance with advice from the Medical Society but in no way alters present memberships. The motion was carried to accept the report and approve the Revisions.

Mrs. Croom announced that Mrs. John J. O'Connell of St. Louis, Missouri, President of the Auxiliary to the Southern Medical Association who had planned to attend this meeting, had a conflicting engagement which required her presence in Washington. She sent her regrets.

Under Old Business, Mrs. Hitch moved that the motion concerning president's pins, tabled at the Fall Board Meeting, be brought from the table and amended to read "That the Auxiliary bestow upon the President and Past Presidents a gift, preferably a pin, or a donation to an Auxiliary Project, as a token of appreciation". The motion was seconded by Mrs. W. P. Richardson. Brief discussion followed concerning the type and quality of pin, the financial outlay involved and the fact that any past president may decline the pin and request the equivalent amount of money to be donated in her name to any Auxiliary project which she may designate. The motion was then carried by unanimous vote. Since the expenditure of money is involved, Mrs. Croom suggested that the Finance Committee handle this project, should the House of Delegates approve the recommendation on Tuesday. In that event, she urged anyone interested in the design to send their suggestions to this committee.

Mrs. Croom then presented a recommendation, approved by the Executive Committee, for the preparation of a History of the Auxiliary to the Medical Society of the State of North Carolina. She stated that the Auxiliary completes its 33rd year with this meeting, and she wished to have such a history prepared for the 35th Anniversary. She explained that many changes have taken place, and many of the newer members were not aware of what had brought the Auxiliary to its present eminence, and were not familiar with the projects and aims of this organization. Mrs. Croom showed a small booklet, published by the A. M. A. Auxiliary commemorating its anniversary, and she suggested something similar. She stated that this would serve as a lasting memorial to Auxiliary members who had worked in the past, as well as a useful guide to present and future Auxiliary members. This task would fall to the Historian and her committee, and Mrs. Croom urged that this work be undertaken promptly so that the booklet may be completed before the 35th Anniversary. Mrs. P. G. Fox moved that the recommendation of the President be accepted, and that the preparation of a Booklet be undertaken under the Chair-

manship of the Historian. The motion was seconded by Mrs. G. M. Billings and was carried.

As the last item on the Agenda, Mrs. Croom requested the election of the Nominating Committee, and stated that according to a revision in the By-Laws, the Nominating Committee is to be composed of five members and two alternates, no two of whom may come from the same District. The nominations were as follows: Mrs. William Romm, First District, Mrs. J. S. Hiatt, Fifth District, Mrs. J. F. Reinhardt, Seventh District, Mrs. Curtis Crump, Tenth District, Mrs. P. G. Fox, Sixth District. Alternates were Mrs. Thomas A. Henson, Eighth District and Mrs. John Reece, Ninth District. These names were read by the Recording Secretary and were elected to office by unanimous vote.

There being no further business to transact and no additional announcements, the Meeting of the Executive Board was adjourned by the President. Refreshments were served in the lobby of the Chapel. Mrs. J. S. Hiatt and Mrs. Fred Langner served as hostesses.

Respectfully submitted,
Mrs. Robert L. Garrard
Recording Secretary

Approved: Mrs. R. D. Croom, Jr., President
Date: June 8, 1956

GENERAL MEETING

The General Meeting of the Auxiliary to the Medical Society of the State of North Carolina was held in the Pine Room of the Carolina Hotel, Tuesday, May 1, 1956. The meeting was called to order at 11:25 A. M. by Mrs. R. D. Croom, Jr., President. The Invocation was given by Mrs. W. T. Rainey of Fayetteville, and was followed by the Pledge of Loyalty.

Mrs. Roscoe McMillan moved that the reading of the Minutes and the Roll Call be omitted since the Minutes would be published in the Auxiliary News. The motion was seconded by Mrs. J. M. Hitch, and carried.

A delightful welcoming address was given by Mrs. Fred Langner of Pinehurst on behalf of the Moore County Auxiliary, the hostess group, and Mrs. A. B. Holmes of Fairmont gave a most appropriate response. The following distinguished guests were then introduced: Mrs. George Lull, wife of the General Secretary and Manager of the American Medical Association; Mrs. Charles Hunter, of Blenheim, South Carolina; Mrs. Lee Stoffel of Charlotte, author of the poem, "Prayer for our Doctors"; Mrs. James P. Rousseau, wife of the President of the Medical Society of North Carolina; Mrs. J. G. Pate of Gibson, N. C.; and Mrs. Charles May, President of the Auxiliary to the South Carolina Medical Association, who brought greetings from our good neighbors and best wishes for a successful meeting.

The President recognized Mrs. P. P. McCain, Chairman of Past Presidents, who introduced the Past Presidents attending the meeting: Mrs. Roscoe McMillan, Mrs. Harry Johnson, Mrs. Reece Berryhill, Mrs. G. M. Billings, Mrs. P. G. Fox, Mrs. Karl Pace, Mrs. C. F. Strosnider, Mrs. W. T. Rainey and Mrs. B. W. Roberts.

Mrs. Harvey May, new Councilor to the Southern Medical Association Auxiliary brought greetings on behalf of Mrs. O'Connell who was unable to be present. She announced plans for the Golden Anniversary of the Southern Medical Association to be held in Washington, D. C. She stressed the friendliness and good fellowship of the organization and urged all Auxiliary members to attend this meeting.

Mrs. Croom introduced Mrs. Paul C. Craig of Wyomissing, Pa., First Vice-President of the Auxiliary to the American Medical Association, who brought greetings from Mrs. Mason Lawson, National President. In her splendid address, Mrs. Craig stressed the value of the Bulletin and called it the Handbook of the Auxiliary. She mentioned particularly the Bureau of Investigation of the A. M. A. which acts as a clearing house on all information, factual and otherwise. She expressed pride and gratification at the tremendous prestige the Auxiliary has gained in recent years, and officers or former officers have been invited to participate in many national movements, such as Radio Free Europe, the President's Committee on Traffic Safety, the formation of G. E. M. S., a training program for baby sitters, and many others. Mrs. Lawson served as a judge for Carol Lane Safety Award. Other health organizations have requested the participation of the Auxiliary, and recruitment of other members to the medical team has been an important function. Medicine is never a one-man job, and nurses, technicians, researchers, social workers, etc. are also in critical demand. The speaker expressed gratification at the splendid work done in North Carolina and said that many phases of the work could well be copied by other states. She mentioned our Sanatoria Bed Endowments in particular. She appreciated the enthusiasm with which members went about their work, and repeated that most of the work is done at the County level, even though suggestions come from National. People feel warm and comfortable when working in groups and Mrs. Craig quoted from social scientists, who have created the motto "BAR": B for Belonging, A for Achievement, and R for Recognition. These three basic facts make for happy group relationships and accomplishments. She urged that local Auxiliaries be given credit for work done by members in other organizations such as hospital auxiliaries, Red Cross, etc. so that feelings of guilt on the part of members could be eliminated when they participate in other health groups more actively than in specific Auxiliary work. Mrs. Craig quoted Mrs. Wayne Babcock, First National Chairman on Organizational work as saying she looked with appreciation on the development of Auxiliaries, based on man's need for woman's services. She considered the preparation of a History of the Auxiliary to the Medical Society of the State of North Carolina an excellent plan, and stressed that everything we do is based on tradition. "Progress is Rivalry with the Best". Mrs. Craig concluded her address with emphasis on A. M. E. F., suggesting a popular project—the sale of knitted dishcloths, which she called "a gimmick with a purpose" since the proceeds are used for the A. M. E. F.

The next speaker was Dr. Elmer Hess, President of the American Medical Association who brought official greetings. He spoke briefly and stressed mainly the obligation of all citizens to register and vote in every election and participate in all community affairs. He contended that we can control every election by working together for the common good, because what is good for the medical profession is good for the nation. Dr. Hess declared he understood the rather trying lot of doctors' wives but stressed their important role of leadership in civic affairs, a responsibility which they cannot evade. Dr. Hess emphasized that creeping socialism is with us now and we must take the leadership now to avoid danger, and the leadership must come from the doctors themselves; they must unite as a common front, because if we become enslaved with socialism and socialized medicine, it is only a ques-

tion of time before we lose everything. He regretted that we have been too apathetic, selfish and self-sufficient, but he affirmed that if we unite now, participate in political affairs, we can still accomplish that which we must do—keep our freedom.

Mrs. Croom replied that the Auxiliary Year Book this year has been dedicated to our Doctors, and she pledged the Auxiliary's help in keeping our freedom.

Dr. J. P. Rousseau, President of the Medical Society of the State of North Carolina who had been scheduled to speak had a conflicting meeting which did not permit his appearance before the Auxiliary at the scheduled time. Mrs. Croom regretted that the Auxiliary would not have the privilege of hearing him. However, Dr. Rousseau left a copy of his address, and the President requested the Recording Secretary to read it in its entirety following the election of officers, and a copy of Dr. Rousseau's address is filed with these Minutes.

The President called upon Mrs. D. M. Royal, Chairman of the Awards Committee to read the long-awaited list of Awards, which were as follows:

Dr. Rachel Davis—ACHIEVEMENT Awards

1. County 30 or fewer Members (Third District), Columbus County, Mrs. A. G. Floyd.

2. County having over 30 Members (Seventh District), Gaston County, Mrs. Harry Riddle. First 100% Membership—Burke (36 Members), Mrs. W. C. Arney. Mrs. G. M. Billings, (2nd Place: Caldwell, 22 Members).

Auxiliary Doing Most to Advance Nurse Recruitment, Mrs. Frederick R. Taylor—Guilford, Mrs. Thomas Henson.

Auxiliary Sending in Largest Number of Subscriptions to TODAY'S HEALTH, Mrs. Karl B. Pace—Mecklenburg (75 reported), Mrs. A. L. DeCamp. Largest Contribution to Student Loan Fund, Mrs. B. Watson Roberts—Forsyth-Stokes (\$150), Mrs. Paul Johnson.

Largest Contribution to A. M. E. F., Mrs. Powell G. Fox—Rockingham (\$100) Mrs. R. E. Truslow. Largest Contribution to Yoder Bed, Mrs. R. D. Croom, Jr.—Forsyth-Stokes (\$250), Mrs. Paul Johnson.

There was a question of duplication in the American Medical Education Foundation Award, and Mrs. Croom announced that it would be her pleasure to give a duplicate award, one to Rockingham County and one to Buncombe County. Guilford and Gaston Counties received honorable mention; they had given an equal amount, but the award was based on a percentage basis, as explained by Mrs. Royal.

Mrs. Ben Royal, Chairman of the Nominating Committee, announced the following slate of officers:

President-Elect: Mrs. D. M. Royal, Salemburg
Second Vice-President: Mrs. Lenox Baker, Durham

Treasurer: Mrs. J. M. Hitch, Raleigh

There were no further nominations from the floor, and Mrs. Wilkinson moved that the nominations be closed, seconded by Mrs. Harvey May. The officers were elected by unanimous vote.

Following the reading of Dr. Rousseau's address, Mrs. P. P. McCain proposed a vote of thanks to Dr. Rousseau and suggested that his challenge for greater activity on the part of the Auxiliary be accepted.

Mrs. McCain then moved into her customary and beloved assignment of installing the new officers. She spoke movingly that this was her 50th year in the work of the Auxiliary, first as the daughter, then as the wife and widow of a physi-

cian. She announced her gratification and deep pleasure in the work of the Auxiliary and the splendid leadership. She prayed for continued leadership and wise guidance in the work of the Auxiliary, that the officers would be unselfish in their contributions and accept the challenges of the parent Society. She requested their pledge that they give their best, which the new officers gave willingly. Mrs. R. D. Croom, Jr., out-going President, then presented the Gavel to Mrs. Harvey May, incoming President, and said, "Pat, you have been elected to the highest honor within the gift of the Auxiliary and with this honor goes this gavel and also a tremendous task. The very best that I can wish for you is that you will have the same co-operation, loyalty and interest on the part of the Auxiliary members that I have enjoyed this year. With these, the honor will be glorified, the tasks minimized and your joys multiplied. Best Wishes".

Mrs. May accepted the Gavel, and in her inaugural remarks she expressed her profound thanks to Mrs. Croom and admiration for her magnificent leadership, and that hers was a record to be proud of. She said that if the Auxiliary is to have any real meaning, it will have to be great every year. She outlined some of her plans for the coming year, and urged a closer working relationship with the County Medical Society, and felt that the husbands will have to be urged to participate in plans for the Auxiliary. She said that each one try to make the County Medical Society Advisory Committee a reality. Mrs. May hoped, with the help of all Auxiliary members, to have a great year and pledged herself to do her best.

Several announcements followed: The President's Breakfast Wednesday morning in the Crystal Room of the Carolina Hotel, the 33rd Annual Meeting of the A. M. A. in Chicago, June 11 to 15 and the necessity of electing 18 Delegates, the names to be submitted before May 20, the Civil Defense Conference in Charlotte on May 9 and 10, and that the Fall Board Meeting would be held at the Barringer Hotel in Charlotte on September 12.

Mrs. Lee Stoffel read her beautiful poem, "Prayer for our Doctors."

God bless our doctors, those who live
By duty's faithfulness,
Who labor hand in hand with Thee
In service sought to bless.

Oh God of Wisdom, make them wise
In man's complexity;
As Thou hast made us intricate,
So let their knowledge be.

Oh God of Power, give them strength
Thru long incessant strain;
And grant them mercy to relieve
Eternities of pain.

Oh Great Physician, who understands
All ills, all mortal feeling,
Bless those who bring thru human hands
Thy miracles or healing!

After the reading of this poem, the Annual Meeting was adjourned by Mrs. May.

Respectfully submitted,
Mrs. Robert L. Garrard,
Recording Secretary

Approved: Mrs. R. D. Croom, Jr., President
Date: June 8, 1956

ANNUAL MEETING — HOUSE OF DELEGATES

The Annual Meeting of the House of Delegates of the Auxiliary to the Medical Society of the State of North Carolina was held on Tuesday, May 1, 1956, in the Pine Room of the Carolina Hotel at 9:00 A.M. The meeting was called to order by the

President, Mrs. R. D. Croom, Jr. The Invocation was given by Mrs. Karl B. Pace.

The President called for the reading of the Minutes. Mrs. W. P. Richardson moved that the reading of the Minutes be omitted in the interest of saving time since these are to be published in the Auxiliary News. The motion was seconded by Mrs. George Paschal, and passed. Mrs. Croom then asked the Recording Secretary to call the roll. 64 Delegates answered the roll.

The President requested that Convention announcements be made. Mrs. P. G. Fox mentioned the luncheon at 1:00 o'clock and said that reservations must be made promptly. Mrs. Hewitt urged everyone to inspect the Auxiliary Exhibit in the main lobby. She called special attention to the various scrap books as well as the beautiful poster from Charlotte. Mrs. Croom conveyed a special invitation to all Auxiliary members from Mr. and Mrs. Howe of Pinehurst to visit Clarendon Gardens. Mrs. May announced the President's Breakfast for Wednesday morning.

Mrs. Croom requested Mrs. P. G. Fox, First Vice-President, to take the Chair while she presented her Annual Report. At its conclusion Mrs. Fox expressed her deep appreciation for the splendid work done, and moved that the Report be accepted as read. Mrs. George Paschal seconded the motion and the report was accepted.

The President called for reports from the Officers. The reports of the President-Elect, Recording Secretary and Corresponding Secretary are filed with these Minutes. Mrs. J. M. Hitch, Treasurer, then read her report, a copy of which is also filed with these Minutes. It will also be published in the Auxiliary News. Mrs. Hitch read the tentative Budget for the year 1956-57, and moved that it be accepted. The motion was seconded by Mrs. Norfleet and was passed.

Mrs. P. G. Fox, First Vice-President, gave a brief verbal report since her formal report is included in the Annual Report; she then introduced the Councilors of the ten Districts. Eight of the Councilors were present, and they in turn introduced their County Presidents.

Mrs. W. P. Richardson, Second Vice-President, gave a brief resume of her report which is in the Annual Report, and introduced the Chairman of the McCain Bed and the Stevens Bed, and regretted the absence of the other two Bed Chairmen. She also introduced Mrs. R. D. McMillan, Chairman of the Student Loan Fund, who gave a brief report.

The President recognized the Chairmen of Standing and Special Committees and stated that their reports also appear in the Annual Report, and they would report only if they had any additions at this time.

Mrs. George Paschal, Chairman of Auxiliary News announced that the deadline for the News is June 15, not July 15 as previously stated, and that news would henceforth be sent to Mrs. W. S. Joyner, the new editor of Auxiliary News.

Mrs. A. R. Cross, Chairman of Nurse Recruitment, announced that she had received reports from 26 counties, although 50 application blanks had been sent out. She requested that nurse recruitment be stressed by all, and emphasized that careers in all fields of health, such as x-ray technician, laboratory technician, secretary, medical records librarian, etc. are in great demand, and the revision to the Student Loan Fund makes it possible to include nursing and allied professions in the eligible category. Mrs. Cross stated that many county organizations have nursing scholarships, and further study will be needed before setting up an Auxiliary Scholarship.

Mrs. R. W. King, Program Chairman, requested that all reports be sent in promptly.

Mrs. Harry Johnson, immediate past Councilor to the Southern Medical Society was recognized and asked to give a brief report. She stated that Mrs. Harvey May is the new Councilor, and had attended the Southern meeting at Houston, Texas, last November and was well received there. She reported that funds from the discontinued Jane Todd Crawford Memorial Fund will be used to send subscriptions for the Southern Medical Journal to residents in gynecology in hospitals in the 17 southern states. The names of these residents in gynecology in the ten accredited hospitals in North Carolina have been sent in. These subscriptions are being furnished the Auxiliary for \$3.00 per year instead of the usual \$6.00.

The reports were accepted.

The President announced that several Revisions in the By-Laws would be read under Recommendations of the Executive Board. Mrs. Croom then called upon the Recording Secretary to read five recommendations made by the Executive Board. The first two were recommended from the Fall Board Meeting and the remaining three were made by the Convention Board Meeting.

- (1) That the Auxiliary bestow Honorary Membership upon two Past Presidents, Mrs. P. P. McCain and Mrs. Frederick R. Taylor. The recommendation was approved by unanimous acclaim. "Miss Sadie" who was present, was recognized, and the President requested the Corresponding Secretary to send a telegram to Mrs. Taylor, who is ill, informing her of the Honorary status.
- (2) That permission be granted the Treasurer to close out the Saving Account for the different Sanatoria Bed Endowment accounts which have been completed, the money being used to purchase two \$1,000 Bonds for the Yoder Bed Fund bringing this Endowment Fund to one-fifth of its completion. Mrs. Roscoe McMillan moved that the recommendation be accepted, Mrs. J. S. Hiatt seconded the motion, and it was carried.
- (3) That the Auxiliary shall bestow upon the President and Past Presidents a gift, preferably a pin, or a donation to an Auxiliary Project, as a token of appreciation. The motion, made by Mrs. W. P. Richardson and seconded by Mrs. Long, was carried by unanimous vote.
- (4) The Executive Board wishes to recommend that the Auxiliary begin work now on a History of the Medical Auxiliary to be ready for the 35th Anniversary, two years hence. This will be a lasting memory to old members and a valuable source of reference to newer members. This project should be started without delay, and will be carried out under the Chairmanship of the Historian. The motion was made by Mrs. John Reece and seconded by Mrs. George Paschal. The vote was affirmative, and Mrs. Croom explained that the Historian will work through a committee appointment by Mrs. May.
- (5) That the Chairman of Revisions be given the authority to restate Article III—Membership, Section 1, of the By-Laws in accordance with instructions from the Advisory Committee of the Medical Society of the State of North Carolina. The motion was made by Mrs. Brinn and seconded by Mrs. Cross. Mrs. Hitch explain-

ed that this provision limiting membership would not alter present membership. The motion was carried by unanimous vote.

There was no further Old Business to come before the House of Delegates.

Under New Business, the President asked for the election of Delegates to the Meeting of the Auxiliary to the American Medical Association in Chicago. After brief discussion regarding the appointment of these Delegates, Mrs. McMillan proposed that those members who know they are going to the Chicago Meeting notify Mrs. May, and that she be given power to appoint them as Delegates. It was pointed out that North Carolina is entitled to 19 Delegates. Mrs. McMillan put her proposal into a formal motion, which was seconded by Mrs. Gullingsrud, and it was carried. The names of the Delegates will have to be in no later than May 20.

The President requested the Recording Secretary to read several congratulatory telegrams and a note from Mrs. Frederick R. Taylor.

There was no further New Business to transact, and the meeting was adjourned for 15 minutes for refreshments.

Respectfully submitted
Mrs. Robert L. Garrard
Recording Secretary

Approved: Mrs. R. D. Croom, Jr., President
Date: June 8, 1956

President's Breakfast

The President's Breakfast was held in the Crystal Room of the Carolina Hotel on Wednesday, May 2, 1956, at 9:00 A. M. Mrs. Harvey May, President, was in the Chair. 41 members attended, and three guests, Mrs. Paul Craig, Mrs. George Lull and Mrs. Furey, were introduced. Each member introduced herself and gave her office while the Recording Secretary checked the roll.

Mrs. May recognized Mrs. R. D. Croom and expressed appreciation for her splendid work during the past year. She announced the tentative schedule for the Fall Board Meeting, to be held in Charlotte on September 12, and she passed out a tentative program. She issued an invitation to all to attend this Board Meeting. Mrs. May also announced the Civil Defense Meeting to be held in Charlotte on May 9 and 10 and urged good attendance. She requested the list of incoming officers from those Counties which had not yet sent in their rosters. There was no further business, and no additional announcements, and the Meeting was adjourned.

Respectfully submitted,
Mrs. Robert L. Garrard
Recording Secretary

Approved: Mrs. Harvey C. May, President
Date: June 4, 1956

ANNUAL REPORT OF THE PRESIDENT OF THE AUXILIARY TO THE NORTH CAROLINA MEDICAL SOCIETY

1955-56

As President of the Auxiliary to the Medical Society of the State of North Carolina, I beg leave to submit the following report:

My tenure of office began in May, 1955, and during this month committee chairman appointments were completed and plans were made to attend the National Convention in Atlantic City in June. It was a great privilege to serve as your presidential delegate and from this convention I received inspiration and information for the tasks ahead.

The better part of the summer months was spent in collecting data and compiling the year-

book and making arrangements for the Board of Directors' Meeting and School of Instruction at the Morehead Planetarium in Chapel Hill on September 14.

Excellent attendance and inspiring messages from Dr. James P. Rousseau, President of the Medical Society of the State of North Carolina and Dr. Charles F. Carroll, State Superintendent of Public Instruction, and greetings from Mr. William N. Hilliard, Public Relations Director of the Medical Society, made this a memorable occasion. (We regretted the absence of Mr. James T. Barnes, a regular attendant.) The Committee chairmen presented splendid reports concerning the year's plans and packets of helpful material and suggestions were delivered to Board members and County presidents.

It now gives me pleasure to present this report concerning our activities which I feel brought to a successful conclusion the plans and hopes of the Auxiliary year 1955-56.

Our program has been large and varied:

1. Increased membership
2. Public Relations
3. Nurse Recruitment
4. Legislation
5. Civil Defense
6. American Medical Education Foundation
7. Today's Health and Bulletin
8. Rural and Mental Health
9. Auxiliary Projects
10. Radio and Movies

To date, March 12, our membership total is 1993, including 37 members-at-large (4 counties still unreported). We now have two 100% organized districts—First and Second—and nine 100% membership counties—Pitt, Carteret, Sampson, Lee, Scotland, Hoke, Lincoln, Caldwell and Burke. Twenty-six counties reported increased membership. One county gave ten honorary memberships to widows.

Our very efficient News Editor has had two goals this year in addition to the usual one of supplying us with four interesting copies of the Auxiliary News. First, the mailing list has been brought up to date and second, an accurate card file has been established. Congratulations and grateful appreciation to Mrs. Paschal and the Hospital Savings Association of Chapel Hill for their invaluable services.

Thirty-six auxiliaries contributed to the American Medical Education Foundation in the amount of \$1,039.80. (Six that gave last year have not reported; eight for the first time.) Medical Education Week will be observed April 22 - 28, 1956.

A total of 375 subscriptions to Today's Health have been sold. This report is approximate since many subscriptions have been renewed directly through the office in Chicago.

We have 115 subscribers to the Bulletin which is a small increase over last year. One county reported 100% subscribers.

Sixteen auxiliaries gave civil defense programs—several with guest speakers. Auxiliaries have had representation at local defense meetings and it is hoped that we will have greater participation in this vital program and excellent attendance at the Conference on May 9-10 in Charlotte.

Legislation has had an important place on our program with several bills being studied. Special emphasis was given to H.R. 7225 and our state participated in the fight against its enactment.

The Auxiliary has continued its interest in Rural Health with seven out of ten districts reporting on

programs. Special study was urged on farm and home accidents. We had fine representation at the various conferences. One Auxiliary acted as hostesses to the Western Health Conference.

Our Mental Health program has been expanded this year. Many Auxiliary members have served on Boards of Directors; some are members of county and state associations; and others have given direct service to mental clinics and hospitals. One mental health clinic was established and one Health Fair sponsored. Mental Health Week will be observed April 29—May 2, 1956.

Seventeen auxiliaries have had Yearbooks—excellent ones from which it would be too difficult to select a "best" one.

Interest has increased in the field of Radio and Movies. Nineteen auxiliaries used these mediums in their programs for Doctor's Day, Mental and Rural Health, Nurse Recruitment, North Carolina Children's Home, Cancer, Heart, and American Medical Education Foundation.

We have cooperated in the Southern Medical Auxiliary's projects: Observance of Doctor's Day and Research and Romance of Medicine. Forty-six Auxiliaries have reported plans to celebrate Doctor's Day and five were engaged in Research and Romance of Medicine, listing fifteen activities.

Our main project at a state level continues to be our Sanatoria Beds. Our third endowment fund of ten thousand dollars (\$10,000) has been completed for the Cooper Bed in Wilson, occupied by Miss Rita Rivers Moore, a graduate nurse of Marshallburg; the other are the McCain Bed in McCain, occupied by Mrs. Betty Jean Hughes of Asheboro, a young mother with two children; and the Stevens Bed in Black Mountain, no guest at this time. Our newest, the Yoder Bed, Chapel Hill, is occupied by Miss Elizabeth H. Hendrick, of Chapel Hill, a former Medical Technologist. The year-round remembrance plan for our guests in the Sanatoria Beds has worked beautifully and all Auxiliaries cooperated according to schedule.

The Student Loan Fund maintained for sons and daughters of doctors, but unused since 1941, has been made available to other worthy and qualified candidates through a change in the By-laws. This year we have been happy to have three recipients of this loan.

The most significant accomplishment has been in the field of Nurse Recruitment. Forty-two Auxiliaries have taken part in this program. One Auxiliary has had a home nursing course in all County High Schools; speakers have been provided for career days; prospective students have been entertained with teas and tours of hospitals; students and nurses have been remembered with parties, shows, books, theater tickets and numerous gifts; nurses' lounges have been furnished and decorated; libraries have been established; one Auxiliary instituted a new award—"capping awards"—for the highest scholastic average among the student nurses in three hospitals; films on nursing were shown in nine high schools; future nurses' clubs were organized; information was sent to Guidance Counselors in twenty-three high schools; and one Auxiliary has a Hospital nurses' aid course for High School students. The Auxiliary maintains 14 county scholarships, one District scholarship, one Past President's Scholarship, and nine loans.

Leaving the most important phase of our work until the last, it is most gratifying to report on our Public Relations which, I believe, can be defined as "doing good." The Auxiliary has endeavored wholeheartedly this year to meet the challenge given by the distinguished President of our State Medical Society, Dr. J. P. Rousseau—"The best

way to serve the medical profession is to put the public interest above every other consideration." Our members have given "active leadership in Community Health", following our national theme and in all community affairs, taking part not only in all health programs, but also in all religious, civic, educational, charitable, safety and civil defense activities, following our own theme—"Service to Others." A list of North Carolina members was sent the Chicago office for "Who's Who in the AMA Auxiliary."

To list a few of the activities and gifts: monetary gift to Salvation Army Maternity Home; recovery bed to hospital; croup and oxygen tent to hospital; party for hospital personnel; set up room for cancer dressings; boxes of supplies for flood victims; equipment for hospital pediatric play room; book carts for hospitals; entertainment for foreign college students; benefit rummage sale for hospital; one Auxiliary had a second place winner in the State Essay Contest; sponsored Fair Booth; kept Red Cross office opened when threatened with closure for lack of funds; one nurse Recruitment chairman gave free nursing time valued at \$500; equipment for mentally and physically handicapped; transportation for clubs needing it, three volunteer workers each Monday for Public Health office; one Auxiliary has 75% of its membership active in 25 local organizations; another has 95% of its membership active in civic work, and countless numbers are members of hospital auxiliaries.

The pleasure of working with you and sharing your accomplishments has been exceeded only by the joy of visiting with you in your local and district meetings. It was my good fortune to be able to accept all invitations extended me with the exception of the Third District, one which conflicted with an invitation already accepted. In all, I attended five district and eleven county meetings.

I served as a member of the State Advisory Committee on Poliomyelitis vaccine and of the Robeson County Heart Committee. I attended a Special Meeting in Raleigh, November 20th at the request of Dr. J. P. Rousseau. I regret that it was not possible for me to attend the many conferences and meetings to which I was invited, but at all times the Auxiliary was most ably represented:

North Carolina Woman's Council—Mrs. E. M. Robertson and Mrs. C. T. Wilkinson

World Affairs—Mrs. K. M. Brinkhous

North Carolina Family Life Council—Mrs. J. D. Stratton

North Carolina League for Nursing—Mrs. Frank Wilson, Jr.

Rural Health—Mrs. P. G. Fox and Mrs. E. T. Beddingfield

Southern Medical Auxiliary—Mrs. Harry Johnson and Mrs. Harvey May

In closing, I could add countless words to this report in thanking you, the Auxiliary, for your loyal cooperation, tireless efforts and prayerful interest. May it suffice to say, I am grateful for the privilege of serving as your president. The meaning of being an Auxiliary member has become deeper; friendship have become stronger and TOGETHER I believe we have progressed in our Auxiliary work.

As we look forward to another year under the capable and enthusiastic leadership of Mrs. Harvey May, I hope we may meet with even greater effectiveness our opportunities and responsibilities.

Respectfully submitted,

Mrs. R. D. Croom, Jr.

President 1955-56

Report Of The President-Elect

In 1955-56 as President-elect I have endeavored to prepare myself for the Auxiliary year of 1956-57 by studying the many facets of Auxiliary work, attending the National Conference of Presidents and Presidents-elect held in Chicago November, 1955, and securing those committee chairmen necessary to begin the work of the Auxiliary in May, 1956.

Besides the Chicago meeting, I have twice met with Mrs. Croom, our president, and other officers, attended the fall meeting of the Board, and have been the guest of the Gaston and Mecklenburg County Auxiliaries.

Mrs. Harvey C. May
President-Elect

Report Of First Vice-President And Chairman Of Organization

The Auxiliary to the Medical Society of the State of North Carolina has held to its usual high standard of accomplishment during 1955-56. We are proud of the fifty wide-awake, thriving county organizations which make up our auxiliary; gratified too, that we have held the line on that number this year. Let us hope we shall soon be able to take another step toward our 100% goal, growing in both members and stature.

First District is 100% organized.

Second District has six medical societies and six auxiliaries. One of our two 100% organized districts. They report one member-at-large.

Third District has five medical societies and six auxiliaries, just one more to meet that 100% goal. Sampson county is the one among the group which has the proud record of 100% membership. There are two members-at-large reported for this district.

Fourth District has eight medical societies and six auxiliaries. One more is needed to gain that coveted 100%. Warren County, the "baby" organization has nine out of ten eligible members, as it has since its formation in May, 1954. There are five members-at-large.

Fifth District has nine medical societies and eight auxiliaries; such a short way to go to reach the 100% goal. Four counties out of the eight, have returned complete reports. Congratulations to Lee County on their 100% membership.

Sixth District has seven county medical societies and five auxiliaries. They maintained their record of the second highest state membership again this year. They have five members-at-large.

Seventh District has four auxiliaries out of a possible ten. Their membership is third highest in the state. They have four members-at-large.

Eighth District holds the record for the largest state membership. They have eight auxiliaries out of a possible nine, and four members-at-large.

Ninth District has seven county medical societies and five auxiliaries. They have five members-at-large. They have the distinction of being the only district with two counties in the 100% membership category. Congratulations to Burke and Caldwell Counties. This, no doubt, had a great deal to do with an overall increase of fifteen members for the district in 1956.

Tenth District has three auxiliaries representing three counties. This district reports five members-at-large.

All districts held meetings this year. These are always sources of information and good fellowship.

Congratulations to the councilors and county presidents on good work well done.

Mrs. Powell G. Fox
First Vice-President
Chairman of Organization

REPORT OF SECOND VICE-PRESIDENT AND CHAIRMAN OF ACTIVITIES

Five of the major activities of the Auxiliary this year have been under the capable leadership of the following chairmen: Mrs. Roscoe McMillan, Student Loan Fund; Mrs. Wm. G. Spencer, Jr., Cooper Bed; Mrs. R. A. Matheson, McCain Bed; Mrs. Eugene Clayton, Stevens Bed; and Mrs. W. L. Kirby, Yoder Bed.

Mrs. McMillan reports that loans have been made from the Student Loan Fund to three students in North Carolina. They are follows: \$500 to Miss Mary Lide, a senior at Bowman Gray School of Medicine, Winston-Salem; \$500 to Mr. Jerome Schacter, a senior at Duke University School of Medicine, Durham; and \$225 to Mr. William Purcell, a senior at the University of North Carolina School of Medicine, Chapel Hill. Contributions as of February 11th amount to \$271, making a balance in the fund of \$1,438.99. This balance will undoubtedly increase by the first of May with additional contributions. Mrs. McMillan has done an outstanding job of reactivating the Loan Fund. In her words, "It has been a profitable year as measured by the motto, 'Service to Others!'"

Mrs. Spencer, chairman of the Cooper Bed reports the happy news that the Cooper Bed Endowment Fund was completed last May. During the past year we have had two guests in the Cooper Bed. Miss Margie Lee Renfrow, an attendant at the State Hospital, was our guest until her discharge in August. She was most appreciative of the many attentions shown her by the Auxiliary members. Our second and present guest is Miss Rita Rivers Moore from Marshallburg, N. C., a 36 year old graduate nurse who had just completed work on a Masters at the University of North Carolina when she was hospitalized. Miss Moore, a delightful person, is most appreciative and would enjoy visits from the Auxiliary members. Mrs. Spencer has sent out the remembrance schedules along with helpful gift suggestions.

Mrs. Matheson, chairman of the McCain Bed, reports that Dr. Geddie Monroe of Fayetteville occupied the McCain Bed from February 15, 1954 until August 4, 1955. Mrs. Rose Ann Thompson, R. N. of Wilmington, was the occupant of the bed from August 4, 1955 until November 19, 1955. There being no one connected with the medical profession in the sanatorium at this time, the McCain Staff recommended Mrs. Betty Jean Hughes, who has been a patient there since May, 1955. Mrs. Hughes, who is from Asheboro, is a young mother with two children. Mrs. Hughes is most grateful to the Auxiliary members for their many kindnesses.

Mrs. Clayton reports that Mrs. Cloninger was our guest in the Stevens Bed from January to March, 1955. When she was discharged, Mrs. Banner, a graduate nurse of Mt. Airy and the mother of two children, was selected to occupy the Bed and was our guest from March until July, 1955. Then Dr. Malcolm Mullen, Internist at State Hospital in Morgantown was our next guest. Fortunately, he made splendid progress and was discharged January 14, 1956, being well enough to continue treatment at home. At the time of this report, we do not have anyone occupying the Bed. All Auxiliary members have been most thoughtful of these three and they have been very appreciative.

Mrs. Kirby reports that our first patient in the Yoder Bed was discharged in November. She was Mrs. Doris Terry, a medical secretary in Durham. Our next guest is Miss Elizabeth Hendrick, Technician at Memorial Hospital, Chapel Hill, who was admitted in November, 1955 and is still our guest. Since the Cooper Bed Endowment Fund was completed last May, Mrs. Kirby has concentrated her efforts on building up the \$10,000 Endowment Fund for the Yoder Bed. As of February 11, 1956, contributions have totaled \$645.38. This is an excellent beginning and it is expected to be larger before the 1st of May. Mrs. Kirby urges the membership to help reach the goal.

This year has been most rewarding. It has seen the actual use of our Student Loan Fund, with loans totaling \$1,225.00 going to three senior students. The completion of the Cooper Bed Endowment Fund and the beginning of the Yoder Bed Fund and the subsequent use of the new bed by a guest; the above mentioned guests who have expressed such deep gratitude for your generosity in making their stays possible and adding to their comfort with so many courtesies. The year-round remembrance schedule was completely revised to include the newly established Yoder Bed at Gravelly Sanatorium. For all of these accomplishments, I would like to express my sincere appreciation to the five chairmen whose efforts have made them possible. The chairmen wish to express their gratitude to the Auxiliary members for your cooperation in following the remembrance schedules and the many individual attentions given our guests, as well as financial contributions.

Mrs. William P. Richardson
Second Vice-President and
Chairman of Activities

REPORT OF RECORDING SECRETARY

A complete record of the transactions of the Auxiliary to the Medical Society of the State of North Carolina for the year 1955-56 has been completed and placed on file. A copy of the Minutes has been sent to the Auxiliary News for publication.

The Recording Secretary attended a meeting in Raleigh on November 11, 1955 at the request of the President of the Medical Society of the State of North Carolina and the President of the Auxiliary to the Medical Society of the State of North Carolina. The meeting was called for the purpose of clarifying the status of some legislation pending before the Congress of the United States. A brief resume of these proceedings has been included with the Minutes.

All correspondence and special activities requested by the President have been completed.

Mrs. Robert L. Garrard
Recording Secretary

REPORT OF THE CORRESPONDING SECRETARY

All general correspondence, official notices, and mimeographed instructions, as outlined by our President, Mrs. R. D. Croom, Jr., have been sent out at intervals during the current year to the county auxiliaries.

Mrs. Z. F. Long
Corresponding Secretary

REPORT OF THE TREASURER

The audited report of the treasurer's records for the year 1955-56 is submitted herewith, receipts and disbursements having been recorded and transactions made according to the By-Laws.

The Yoder Endowment Fund has reached almost

half its goal, now having \$4,500.00 in Series "K" United States Savings Bonds. If contributions are made by the county auxiliaries for the next five years with the same generosity as in the past, this fund will be completed by 1961.

The interest received yearly on United States Savings Bonds in the four Endowment Funds now totals \$984.00, which is more than sufficient to care for the upkeep of the beds in the four State Sanatoria.

We are especially proud of our membership of 2,052 and my gratitude is extended to each county treasurer for her splendid cooperation. My appreciation is also extended to Mrs. R. D. Croom, Jr., and to the Executive Board.

A master file has been set up, this being in alphabetical order, so that the membership of each individual may be followed from the time she first became a member of the Auxiliary. The past three years have been completed and it is the hope of your treasurer to record within this next year the individual information from 1923 to 1953. This will facilitate handling Life Members, or those who have paid dues continuously for a thirty-year period.

Mrs. J. M. Hitch

REPORT OF THE FINANCE COMMITTEE 1956-1957 Budget

The Finance Committee of The Auxiliary to the Medical Society of the State of North Carolina submits the following budget for 1956-1957, based on collecting dues of \$2.00 from 1,945 members:

Mrs. Harvey C. May, President-Elect
Mrs. Powell G. Fox,
First Vice President
Mrs. Joseph M. Hitch, Treasurer

ESTIMATED RECEIPTS

GENERAL FUND BALANCE 5-30-56		
Current Expense Fund.....	\$1,183.59	
Convention Expense Fund.....	96.04	
Past Pres. Nurses Scholarship Fund	10.00	
TOTAL GENERAL FUND BALANCE 5-30-56.....		\$1,289.63
National Dues	\$1,945.00	
State Dues	1,945.00	
1957 Convention Expense (from Medical Society)	500.00	4,390.00

TOTAL GENERAL FUND (Estimated) **\$5,679.63**

SANATORIA BED FUND BALANCE 5-30-56		\$ 500.00
INTEREST ON U. S. SAVINGS BONDS		
Cooper Endowment Fund	\$ 276.00	
McCain Endowment Fund	317.40	
Stevens Endowment Fund	266.40	
Yoder Endowment Fund	124.20	984.00

TOTAL SANATORIA BED FUND **1,484.00**

TOTAL ESTIMATED RECEIPTS **\$7,163.63**

ESTIMATED DISBURSEMENTS

Dues to Woman's Auxiliary, A.M.A. **\$1,945.00**

1957 CONVENTION EXPENSES		
Convention Exhibit	\$ 15.00	
Memorials Chairman	20.00	
Special Entertainment of Invited Speakers	50.00	
Other Expenses	415.00	500.00
GENERAL EXPENSES		
Audit of Treasurer's Books	\$ 75.00	
Bonding of Treasurer	50.00	
Convention Exhibit (See Convention Expenses)	—	
Miscellaneous	25.00	
Printing and Supplies	494.50	
Safe Deposit Box Rental	5.50	650.00

OFFICERS

PRESIDENT (including Corresponding Secretary)		
A.M.A. Meeting (President or her appointed delegate)	\$ 100.00	
Other Expenses	250.00	\$ 350.00

PRESIDENT-ELECT

National Board Meeting	\$ 100.00	
Other Expenses	50.00	150.00

Chairman of Past Presidents	5.00	
First Vice President	15.00	
Second Vice President	10.00	
Recording Secretary	10.00	
Treasurer (Postage and Supplies)	150.00	630.00

COMMITTEE CHAIRMEN AND COUNCILORS

American Medical Education Foundation	20.00	
AUXILIARY NEWS	225.00	
Awards	5.00	
Bulletin	5.00	
Civil Defense	5.00	
Councilors (\$10.00 each for 10 Districts)	100.00	
Councilor to the Southern Medical Association Aux.	5.00	
Doctor's Day	5.00	
Historian	10.00	
Legislation	15.00	
Memorials (See Convention Expenses)	—	
Mental Health (\$2.00 membership; \$13.00 Chrm.)	15.00	
N. C. Family Life Council (\$10.00 dues; \$5.00 Chrm.)	15.00	
N. C. Health Council News	10.00	
N. C. Council of Women's Organizations	25.00	
Nominations	5.00	
Nurse Recruitment	10.00	
Press and Publicity	25.00	
Program	10.00	
Public Relations	20.00	
Radio and Movies	5.00	
Research	5.00	
Revisions	10.00	
Rural Health	5.00	

SANATORIA BED CHAIRMEN

Cooper	\$ 5.00	
McCain	5.00	
Stevens	5.00	
Yoder	5.00	20.00
Scraphook	15.00	
Student Loan Fund	5.00	
Today's Health	10.00	505.00

UPKEEP OF SANATORIA BEDS

Cooper	\$ 219.00	
McCain	219.00	
Stevens	219.00	
Yoder	219.00	876.00

TOTAL ESTIMATED DISBURSEMENTS

\$5,266.00

RESERVE FOR CONTINGENCIES

General Fund	\$1,289.63	
Sanatoria Bed Fund (\$108.00 to be transferred to the Yoder Endowment Fund in accordance with the By-Laws, Article VIII, Section 3b)	608.00	

TOTAL RESERVE FOR CONTINGENCIES

1,897.63

TOTAL FUNDS (Estimated)

\$7,163.63

Report On
THE AUXILIARY TO THE MEDICAL SOCIETY OF THE
STATE OF NORTH CAROLINA
Raleigh, North Carolina
JUNE 30, 1956

Mrs. J. M. Hitch, Treasurer
The Auxiliary To The Medical Society Of The State Of North Carolina
Raleigh, North Carolina
July 13, 1956

We have made an examination of the recorded cash receipts and disbursements of The Auxiliary To The Medical Society Of The State Of North Carolina for the year ended June 30, 1956.

A detailed examination was made of all recorded cash transactions for the period covered and all recorded receipts were found to have been promptly deposited. Disbursement were evidenced by properly executed cancelled checks which were supported by invoices and other supporting data. The cash balances in the various funds were reconciled with the amounts reported directly to us by the depositories. We inspected the government bonds held in safekeeping at June 30, 1956.

In our opinion, the accompanying statements present fairly the results of the Auxiliary's cash transactions for the year.

WILLIAMS, URQUHART & FICKLIN

BALANCE SHEET—JUNE 30, 1956

EXHIBIT "A"

ASSETS

ASSETS:		Issue	Series	Maturity Date	Total	General Expense Fund	Sanatoria Fund	Martin L. Stevens Endowment Fund	McCain Endowment Fund	George M. Miller Endowment Fund	Paul Yoder Endowment Fund	Sturges Loan Fund
Cash	In Banks—Exhibit "B"				\$ 3,503.86	\$ 1,289.63	\$ 537.20	\$	\$	\$	\$	\$ 1,652.67
Investments (At Cost):												
U. S. Savings Bonds		4-1-45	G	4-1-57	\$ 1,000.00			1,000.00				
U. S. Savings Bonds		6-1-47	G	6-1-59	1,000.00			1,000.00				
U. S. Savings Bonds		7-1-48	G	7-1-60	2,000.00			2,000.00				
U. S. Savings Bonds		2-1-49	G	2-1-61	2,000.00			2,000.00				
U. S. Savings Bonds		7-1-50	G	7-1-62	2,000.00			2,000.00				
U. S. Savings Bonds		6-1-51	G	6-1-63	1,000.00			1,000.00				
U. S. Savings Bonds		6-1-52	K	6-1-64	1,000.00			1,000.00				
U. S. Savings Bonds		8-1-54	K	8-1-66	1,500.00				2,500.00	1,500.00		
U. S. Savings Bonds		9-1-54	K	9-1-66	2,500.00							
U. S. Savings Bonds		5-1-55	K	5-1-67	1,500.00					1,500.00		
U. S. Savings Bonds		6-1-55	K	6-1-67	3,000.00				7,000.00	3,000.00		
U. S. Savings Bonds		6-1-55	K	6-1-67	7,000.00							
U. S. Savings Bonds		6-1-55	K	6-1-67	1,000.00						1,000.00	
U. S. Savings Bonds		6-1-55	K	6-1-67	1,000.00							1,000.00
U. S. Savings Bonds		8-1-55	K	8-1-67	4,000.00				2,000.00	4,000.00		
U. S. Savings Bonds		8-1-55	K	8-1-67	2,000.00			500.00				
U. S. Savings Bonds		9-55	K	9-67	500.00							
U. S. Savings Bonds		5-56	K	5-68	2,000.00							2,000.00
U. S. Savings Bonds		6-1-56	K	6-1-68	1,500.00							1,500.00
TOTAL INVESTMENTS					37,500.00			10,500.00	11,500.00	10,000.00	4,500.00	1,000.00
TOTAL ASSETS					41,003.86	1,289.63	537.20	10,500.00	11,500.00	10,000.00	4,524.36	2,652.67
LIABILITIES					NONE							
SURPLUS					\$41,003.86	\$ 1,289.63	\$ 537.20	\$10,500.00	\$11,500.00	\$10,000.00	\$ 4,524.36	\$ 2,652.67

GENERAL INQUIRY
ROYAL ARMY
SARAJEVO

STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDED JUNE 30, 1956

EXHIBIT "B"

	General Expense Fund	Sanatoria Fund	Martin L. Stevens Endowment Fund	McCain Endowment Fund	George M. Cooper Endowment Fund	Paul Yoder Loan Fund	Student Fund
RECEIPTS:							
National Dues	2 2,054.00						
National Dues—Arrears	6.00						
State Dues	1,540.50	\$ 513.50			\$		24.52
State Dues—Arrears	4.50	1.50		9.32	1.59		
Interest On Bank Savings Accounts							
U. S. Savings Bonds Redeemed (Cost):							
Stevens Endowment Fund	1,642.00		240.50				
McCain Endowment Fund	3,660.00						
Cooper Endowment Fund							
Interest On U. S. Savings Bonds Redeemed:							
Stevens Endowment Fund	118.95		84.50				
McCain Endowment Fund	215.00						
Cooper Endowment Fund							
Interest On U. S. Savings Bonds Held As Investment:							
Stevens Endowment Fund		259.50					27.60
McCain Endowment Fund		289.80					
Cooper Endowment Fund		220.80					
Student Loan Fund		27.60					
Transfer From Savings Accounts:							
Stevens Endowment Fund		752.75					
McCain Endowment Fund		628.33					
Cooper Endowment Fund		107.67					
Yoder Endowment Fund		1,180.02					
Student Loan Fund	1,225.00						
Fall Board Meeting	16.13						
Past Presidents' Nurses' Scholarship Fund	10.00					\$ 989.50	459.00
Contributions						188.00	
Proceeds From Bingo Party							
TOTAL RECEIPTS	10,492.08	4,306.47	8.57	9.32	1.59	1,177.50	511.12

REPORT OF FIRST MEDICAL DISTRICT

The First District Auxiliary is pleased to report that we have maintained our status as one hundred percent organized, this being our first full year. In spite of our wide distribution, we have held four well-attended District meetings. We have been guests of First District Medical Society for a social hour and dinner each time, and have been invited to attend their lecture programs.

The Chowan-Perquimans unit, with only eight members, has done outstanding work in public relations, providing a speaker and film for Hospital Auxiliary programs, Womans Club, and Mothers Clubs, as well as instruction to Nurses Aides. They made substantial gifts to their two bed guests, one of the gifts being a set of Reader's Digest Condensed books which can be enjoyed also by future patients.

The Bertie-Hertford-Gates unit made its special effort on subscriptions to the Bulletin and Today's Health, and to the Student Loan Fund and the American Medical Education Foundation.

The Camden-Currituck-Dare-Pasquotank unit carried on an extensive program based on leadership in all types of civic affairs. They held four luncheon meetings, and contributed to all major Auxiliary projects.

/s/ Mary G. Brinn
Councilor, First District

REPORT OF SECOND MEDICAL DISTRICT

The Second Medical District has 6 active auxiliaries with 112 members; a loss of 4 members. This report is being made without a report from one county.

District Two is 100% organized. An all-out effort has been made for membership-at-large.

The District Meeting was held in Greenville, with Mrs. R. D. Croom, State President, Mrs. P. G. Fox, Mrs. George Paschal, Auxiliary News, Mrs. K. B. Pace, and Dr. Rachel Davis as speakers.

Financial report:

Yoder Bed	\$101.00
Student Loan Fund	16.00
Amer. Med. Ed. Foundation	46.00

As a whole there was an increase in listed donations. Some counties have not yet donated.

All counties made an effort to follow the State Programs. All counties observed Doctor's Day. Doctor's Day was observed in various ways; some had banquets, some had recognition by notes to the Doctors and donations to the American Medical Education Foundation. Pitt County started a patient's library at their local hospital in honor of their doctors. The Future Nurses' Club help as librarians in this project. Pitt County Auxiliary plans a gift to their Doctors' Lounge in their honor.

All community drives were participated in: i. e., T. B., Red Cross, etc.

Mrs. L. E. Kling of Beaufort County, President of Wash. Woman's Club, has been listed in National Roster of "Who's Who."

Carteret maintains 100% membership.

Pitt County had the misfortune of decease of two members—Mrs. Mayr and Mrs. Blount, both of Greenville. Our sympathy.

All counties have been active in Health Clinics.

Today's Health sales stand as follows: 53 sold; 16 to doctors, 12 to schools, 2 to beauty shops.

It would appear that this year has not reached perfection but all counties have cooperated and worked hard. Perfection is always just ahead, and another year starts. We continuously strive for a goal.

/s/ Mrs. W. C. Piver, Jr.
Councilor, Second District

REPORT OF THIRD MEDICAL DISTRICT

Members of the Third District, retaining their usual spirit of warmth and cooperation, have again the feeling of accomplishment that has existed the past four years of organization.

By more active participation in church, civic and social affairs, the four Auxiliaries of this District have expanded in their Public Relations Activities.

All four Auxiliaries have had chairmen to correspond to State Chairmen; are making plans for Doctor's Day; have participated in all local drives; have contributed to Nurse Recruitment; have elected officers for next year and sent their names to President-elect.

Three Auxiliaries contributed to Yoder Bed fund; one to Student Loan Fund; two to American Medical Education Foundation; three participated in caring for guests in McCain and Yoder Beds; two for guests in Stevens and Cooper Beds; two had an Advisory Committee from their component Medical Society; two followed suggestions given in the State Program; three Auxiliaries took part in campaign for Nurse Recruitment; one had a yearbook. One hundred subscriptions to Today's Health were sold - an increase over previous years.

Columbus County, although a small Auxiliary, feels, much has been done over and above the assigned projects for the year. They have had splendid cooperation. They feel their most important accomplishment has been the continuation of a \$100 Nursing Scholarship. This group sponsored a speaker on nursing for the Social Standards Day in the local high school and sent a \$5.00 contribution in her name to "The School of Nursing Committee of the Medical Foundation of North Carolina"; have contributed to Yoder Bed Fund; sent gifts to occupants of all Sanatoria Beds; contributed to Student Loan Fund; contributed to American Medical Education Foundation; helped in all Civic drives; sold forty-five subscriptions to Today's Health; made dressings for Cancer Clinic and acted as hostess two days for T. B. Mobile Chest X-Ray Survey. Columbus County Auxiliary was hostess to the annual meeting of the Third District Medical Auxiliary February 14th. Plans are underway for Doctor's Day. I personally know this group to be active in all church, school, and civic affairs - many holding responsible positions.

Sampson County again has had a nursing scholarship but as yet do not have an applicant. They have been active as individuals in community affairs; have given to American Medical Educational Foundation; contributed to McCain Bed and sent a Christmas gift to occupant of Yoder Bed. Claiming no tangible actions, they have discussed and emphasized better relations between the doctor and his patient in everyday living and community life. They feel their most outstanding achievement is their Civil Defense Program—hoping this effort will awaken their community to better preparedness.

Onslow County, with a small membership of 12, has no formal program at their meetings but follow State Committee Chairmen as closely as possible. They have contributed to Yoder Bed Fund; have sold six subscriptions to Today's Health; have made plans for Doctor's Day; have actively participated in campaign for nurse recruitment; and have, as individuals, taken part in six different national drives. This county claims as their largest single achievement, the work done by all members in conjunction with the hospital auxiliary and, also the promotion of understanding and friendliness among themselves.

New Hanover, Brunswick, Pender Auxiliary has contributed generously to Yoder Bed Fund, Student Loan Fund; and American Educational Foundation; has made plans for Doctor's Day; sold forty-seven subscriptions to Today's Health; have been active in nurse recruitment and in each and every civic drive; gifts were sent all Sanatoria Bed patients; have dressed dolls for Salvation Army; counted T. B. Seal returns (100 hours); have worked extensively with Girl Scouts, Cub Scouts, Community Concert, N. C. Symphony, Garden and Music Clubs; actively and willingly participated in all civic drives. This tri-county organization considers their most outstanding achievement their plan to donate equipment for the mentally and physically handicapped - and work on the proposed Presbyterian College for Wilmington.

As Third District Councilor, I have kept in contact with my four Auxiliary Presidents and several members of my two unorganized counties. I attended the Fall Board Meeting in Chapel Hill and planned with the aid of the four county Presidents and my District Secretary, Mrs. W. E. Baldwin, the Third District Meeting, which was held in Whiteville, February 14, 1956. Dr. Everett Barnard, Baptist Hospital, Winston-Salem, North Carolina, spoke on "Religion in Relation to Medicine" at this luncheon meeting. Each year during my term as Councilor I have grown prouder of my district, their outstanding work in all phases of community activities, ability to promote good relations between the public and the medical profession - making us realize even more that —

"And if while you make your personal stake
Another can make one, too
Your Auxiliary will be what you want it to be,
For it isn't your Auxiliary—it's you."

/s/ Mrs. W. A. Greene
Councilor, Third District

REPORT OF FOURTH MEDICAL DISTRICT

The Fourth District composed of Edgecomb-Nash, Green, Halifax-Northampton, Johnston, Wayne and Wilson Counties have 139 paid members.

I have contacted all of our county presidents over the phone and visited all of the counties except Warren and Green. Green is still unorganized. I am happy to say that all counties have been active except Nash-Edgecomb which have worked on a purely social basis. I think the public relations plans that gives the counties credit for their participation in local projects is definitely creating more interest and making a stronger organization.

I attended the fall board meeting at Chapel Hill September 14 and the Rural Health Conference in Raleigh on October 6. I invited the county presidents to join me for lunch after the morning session so that we might plan our 4 district meeting.

Nash-Edgecomb counties were hostesses to the Fourth District Meeting October 8 at the Ricks Hotel in Rocky Mount. Mrs. Croom, State President, our honor guest for the day, spoke to us briefly on Auxiliary work and Mrs. Lewis McKees, State Legislative Chairman, our guest speaker, gave us a very interesting and informative review of the Bricker Amendment, Jenken-Keogh and Ray Bills, Re-insurance-Eisenhour Walerton, H. R. 7225 Social Security Amendments, that are coming up for legislation when Congress convenes in January. There were 24 members present. After a very interesting meeting, our hostesses served a delicious luncheon.

Wayne County has followed the suggestions given in the State Program. All other counties have had from two to five meetings a year and have followed

many of the state suggestions, except Edgecomb-Nash which has worked on a purely social basis.

All auxiliaries have done fine work in the various civic drives, community projects and church work. I feel that the work has been greater than the reports show for I do not think they fully realized that it could count on their auxiliary reports.

Five counties have contributed to the Yoder Bed Fund and the American Medical Education Fund. Two have contributed to the Student Loan Fund. Six plan to observe Doctor's Day. Four counties have remembered guests in Sanatoria Beds with gifts. Fifty-three subscriptions have been sold to Today's Health and seven more have been promised. One county has a year book. Halifax-Northampton Counties have started a nurse recruitment project with girls 15 years and up that I feel may be very fruitful.

I have enjoyed serving as Councilor this year and I want to thank each member for their loyalty and co-operation. I also want each member to feel that I am anxious to help in every way I can and with their support, I feel that the Fourth District will do even bigger things next year.

Mrs. E. L. Strickland
Councilor, Fourth District

REPORT OF FIFTH MEDICAL DISTRICT

The Fifth District, with 179 paid members, has 8 active Auxiliaries - Cumberland, Harnett, Hoke, Lee, Moore, Richmond, Robeson, and Scotland - and one inactive or unorganized county - Chatham.

The financial report is as follows:

Yoder Bed	\$32.50
Student Loan Fund	\$35.00
AMEF	75.00
Cooper Bed	5.00

Subscriptions to Today's Health total 47 with 39 being placed in doctor's offices and 8 in school libraries.

Auxiliaries have participated in various civic drives, including Cancer, Heart, Red Cross, T. B., and Polio. All counties have been active in numerous civic, local church organization and clubs, thus helping to promote better public relations.

Plans for Doctor's Day by all organized Auxiliaries, include dinners, news editorials, red carnations on each doctor's desk, church bulletins, posters, radio, and donations to AMEF Fund.

Mrs. W. S. Gordon, President of Cumberland County, with her 55 members reports working with retarded children at School for Handicapped Children; entertaining Freshman Class at local hospital; furnishing flowers for the graduating class; chartering a bus and taking 25 High School Seniors to Duke Hospital; having interesting programs on Civil Defense, Child Guidance, and State President and District Councilor as guest speakers; and remembering the guest in McCain Bed with a cash gift of \$5.00. Plans for a Silver Tea have been made.

Harnett County, with Mrs. Bruce Blackmon as President, has 16 members who have actively helped to organize the Dunn Hospital Woman's Auxiliary. Three good programs have been held on "Rural Health and Accident Prevention", "Civil Defense", and State President as guest speaker.

Hoke County, led by Mrs. Will Hewitt, has 100% membership of only 6 members. Three meetings, chiefly social in nature, are held during the year, high-lighted with the Doctor's Day Dinner, at which time many guests of the Sanatorium Staff are included.

Lee County, with Mrs. Waylan Blue as President, reports having interesting programs on Civil

Defense and Rural Health; sending subscriptions of the Reader's Digest to McCain Bed guest; increasing fund for Nurse's training from \$48.00 to \$62.00; and working with the Future Nurses Club at the high school.

Moore County with 13 members—and Mrs. A. A. Vanore leading, are planning to help with the entertainment at the State Convention. Many of its members are actively working with the County Hospital Auxiliary. A subscription to the Saturday Evening Post was sent to the McCain Bed patient.

Richmond County's 20 members, Mrs. H. O. Queen as President, have planned a dance to raise funds for AMEF; have visited guest in McCain Bed and given her a gift.

Robeson County with 43 members and Mrs. A. R. Pittman, President, reports interesting programs on "Emotional Development of Child from Birth to Adolescence", "History of Robeson County Medical Auxiliary" (Mother-Daughter luncheon), "Our Part in the Safety and Civil Defense Program", and "The Temperate Zone" (one act play on Mental Health). They plan to have a radio program for an entire week in regard to Public Health Forum. Each guest in Sanatoria Beds was remembered; books were donated to Nurses Library; subscription to "Charlotte Observer" and Community Concert tickets were given to Nurses; \$400.00 was donated to furnish a new Pediatric play room for local hospital; a Heart Bridge Luncheon was sponsored March 14th; and a scholarship fund for nurse has been maintained.

Scotland County, led by Mrs. W. T. Brown, with 15 members, have only 2 meetings a year; sent a Christmas gift to McCain Bed patient; and have plans for a Doctor's Day Dinner.

As Fifth District Councilor, I have kept in touch with my Auxiliary Presidents, attended the Fall Board Meeting in Chapel Hill and 3 county auxiliary meetings, and have held one District Meeting in Southern Pines with Mrs. R. D. Croom, Jr. as our guest speaker, followed by a social hour and dinner.

Mrs. J. S. Hiatt, Jr.
Councilor, Fifth District

REPORT OF SIXTH MEDICAL DISTRICT

Having accepted the responsibility of being the Sixth District Councilor, my duties have been studied and discharged as best they could be done by me. Recognition and an envelope of instructions were given to me at the Fall Board Meeting of the Auxiliary to North Carolina Medical Society at Chapel Hill.

Plans were made immediately for the Sixth District meeting which was held with success and much praise from the doctors, some of whom are from unorganized counties for Auxiliary Work. Sixth District Auxiliary met with the Sixth District Medical Society at Butner. Our program with names of our County Auxiliary Presidents our speakers name and subject, was given publicity through the Sixth District Medical Society first through their communication with County Medical Societies and secondly through space on their printed programs which included the above information about our meeting.

Sixth District County Presidents decided that an annual meeting of the Sixth District Auxiliary was sufficient. Mrs. J. R. Kernodle extended an invitation for the District to meet next with Alamance-Caswell Auxiliary. County presidents gave inspirational accounts of work done and planned. All their membership had been invited to attend the meeting at Butner. Dr. Robert Helm of Wake Forest College was the speaker on Mental Health

and Its Achievement; he gave suggestions to doctor's wives on how they could contribute to good mental health for society in their own communities.

Letters for approval and permission to organize Auxiliaries in counties not now organized were written to County Medical Society of unorganized counties. There was no response. Names of doctors and their wives in said county societies were secured. Membership-at-large invitations were sent to the wives and a revised list was forwarded to the Treasurer of the Auxiliary to North Carolina Medical Society.

Contact with county presidents has been made through the mail; reminders were sent in plenty of time for annual reports, these reports were acknowledged received; councilors reports were made as requested in instructions to councilors. An expense account is being considered at this early writing of a narrative report.

Mrs. C. T. Wilkinson
Councilor, Sixth District

REPORT OF SEVENTH MEDICAL DISTRICT

There has been a steady growth in membership and interest within the auxiliaries of Seventh District this year, but it is still my sad duty to report no new organizations. The district meeting was held in conjunction with Medical Society in Wadesboro on November 16. The ladies of Anson County entertained us most graciously with a tea, bridge and golf at the Twin Valley Country Club, a visit to see the wild geese at Gaddy's lake, and a delicious banquet at the club.

Cabarrus County Auxiliary has continued this year to award a prize of \$25.00 to the winner of the essay contest and had the distinct pleasure of seeing their winner achieve second place in the state contest. They have established a Student Loan Fund, which will pay one-third the tuition of a student nurse for three years at Cabarrus Hospital, in honor of their doctors. Many of their members are newcomers so they feel great strides have been made in promoting friendly relations through their auxiliary.

Interest and attendance have continued high in Gaston County. They have several new, worthwhile projects now in the formative stage, two especially deserving mention. Gaston County is primarily a textile community so they feel it vital that employers should be brought to realize the advantages of planned occupational health. It is their desire to spearhead this movement. As a beginning they had Dr. Logan Robertson of Asheville, who is an expert in the field, speak at their October meeting on ways and means of accomplishing this. After seeing and approving an AMA film, they decided to make the AMA films available to all civic organizations for no fee other than return postage. At the March meeting, Mrs. Margaret Egan, Director of Women's Activities for AMEF in Chicago, will speak to the group and assist them in making plans for their Eighty Dimes campaign. Other honored guests at this meeting will be the state president, Mrs. Croom, president-elect, Mrs. May, and district councilor, Mrs. Byrnes. All objectives have been carried out willingly and efficiently and a very generous contribution of \$260.00 has been made to auxiliary causes.

Although small in numbers there is nothing small about the accomplishments this year of the ten members of Lincoln County Auxiliary. When the Red Cross office was threatened with closure, due to lack of funds, they helped move and reorganize the office in new quarters. Some members even took the prescribed course in order to assist in keeping the office open five days a week. They also helped

with the Salk vaccine program and the bloodmobile by doing clerical work and nursing. The chairman of Nurse Recruitment gave the equivalent of \$500 worth of time in free nursing. A gift of \$10.00 was given to a local boy, who was paralyzed after a fall from a tree. The group acted as hostesses at the opening of the new wing at Crowell Memorial Hospital, greeting over a thousand people.

The goal of Mecklenburg County Auxiliary this year was to have all members participate actively in the work of the organization. Variety was the 'spice' of the year in programming and place of meeting. All regular projects of the auxiliary were carried out in a commendable manner and a total of \$382.75 was made to all causes. In addition to the two Student Loan Fund Scholarships now in use, a new award has been instituted. Called the "Capping Awards", this award will be given to the student nurse making the highest scholastic average at the end of the pre-clinical period in the three local hospitals. The outstanding achievement of the year was the complete revision of financial planning and establishment of a budget.

No report from this district would be correct or complete without mention of the many and varied social events scheduled throughout the year. Some have become traditional and others subject to change. Doctor's Day always receives its rightful attention with parties and flowers and this year each auxiliary will celebrate in its own fashion.

Serving as councilor of Seventh District has been a rewarding experience for me and I extend to my successor, Mrs. James F. Reinhardt of Lincolnton, warmest wishes for a successful tenure in office.

Mrs. Thomas H. Byrnes
Councilor, Seventh District

REPORT OF EIGHTH MEDICAL DISTRICT

From the fine reports that have come in, the Eighth District of the Medical Auxiliary has had the best year we have ever had. All phases of the state work have made great strides, each auxiliary has noted increased interest in their work and projects. In September, our nursing scholarship winner entered Cabarrus County Hospital to begin her nursing career. Through the scholarship fund raised by the district we were able to pay \$150.00. Late in October our candidate decided she didn't want to be a nurse and left the hospital. We were lucky, however, in finding a second year student who had a fine record and needed financial help so we transferred our funds to her account. We have since had many favorable reports of her work. Our District Meeting was held in North Wilkesboro in October. The Wilkes - Alleghany Group was hostess for the meeting which was followed by a lovely tea. Later we joined the doctors for a social hour and dinner. At the Meeting we decided to use our scholarship money for a second year nursing student. On the local level nurse recruitment still remains our number one aim. Three auxiliaries are helping student nurses through scholarships, student loan funds, and emergency funds. Two are supplying speakers for High School Career Day on nursing and two teas for high school girls and nurses were held.

Our membership for the year has shown a great increase. We now have 401 members with Guilford County having the most - 164. There are 117 in the Greensboro Branch and 47 in the High Point Branch. Over and above the money put into nurse recruitment we have made outstanding contributions to all state projects. \$324.50 was given to the Yoder Bed Fund, \$205.00 to the Student Loan Fund, \$4.50 to the Sanatoria Fund, and \$268.00 to the American Medical Education Foundation. Donations of money, gifts, cards, and notes were sent to all patients in the Yoder, Cooper, McCain, and Stevens Bed. 78 subscrip-

tions to Today's Health were sold, 52 going to doctor's offices. Three counties have yearbooks. This year the Forsyth-Stokes Auxiliary put out a news-sheet of its own, telling of their activities and news about their group, along with this they stressed educational programs and more information on the vital points relative to the Auxiliary aims.

Doctor's Day activities have been planned in each county. The programs have had a wide range of interest. Flowers were sent to the doctors' offices. Radio and T. V. interviews were held, dinners and entertainments were held, window displays arranged, and donations made in honor of the doctors. Special note of the day was made in church services, and notes were placed on trays of hospital patients telling of the meaning of Doctor's Day.

Radio, movies, and T. V. have been used to a great extent to bring information to the general public. Forsyth-Stokes also had a radio program on nurse recruitment. Medical Education Week was the topic of one T. V. program.

All auxiliaries have reported great activity among the doctors' wives in all medical and civic drives. Many have served on civic organization boards. Several were reported helping with the mass Salk vaccine program throughout the state. Two groups have acted as hostesses for Medical Symposia and to assist in a Medical Forum. A good idea in public relations was carried out when one group invited the Drug and the Dental auxiliaries to meet with them. A report from Ashe-Watauga group says that the county will hold separate meetings next year. Because of the bad winter weather, they met April through October. They plan an Accelerated program as separate county units.

As I close this term as councilor of the Eighth District, I am impressed with the great growth in membership and the interest we have had. Our nurse recruitment program for the district has been outstanding, and as a whole, our work has been rewarding and very worthwhile. It is a fine group to work with and the fellowship is wonderful. Thank you for the privilege.

Mrs. C. Henry Sikes
Councilor, Eighth District

REPORT OF NINTH MEDICAL DISTRICT

The Ninth District held its annual meeting in Mooresville on September 29. Each county president gave a brief report of activities and summary of projects to be carried out during this year. All five of the organized counties in the Ninth District took part in the campaign for nurse recruitment, with two counties supporting a yearly nurses scholarship and one county, a nurses loan fund. The total amount contributed to various funds was \$223.00, each auxiliary contributing to the American Medical Education Foundation. Members of every auxiliary in this district took part in all drives carried on in their respective communities. Caldwell and Burke counties have 100% membership for the third consecutive year. Doctor's Day will be observed by each auxiliary in some special way along with the traditional red carnation to each doctor residing in their county.

Our president, Mrs. R. D. Croom, Jr. was our speaker and gave an interesting and informative talk on activities of the Medical Auxiliary, with special emphasis on the American Medical Education Foundation. Her talk was presented in such a delightful manner and her visit will be long remembered by members of the Ninth District. Mrs. Croom and I were presented beautiful orchid corsages by the Mooresville Auxiliary and they were even more appreciated when we learned that they

were grown by a doctor's wife in that community.

At this meeting the five auxiliaries voted to share the \$25.00 achievement award won by this district last year, and sent their part to the bed fund. It was also announced that Mrs. William Long of Mocksville, Rowan—Davie Auxiliary member, had accepted the office of councilor for this next term.

After the councilor's report for 1954-55 was read by the District Secretary, Mrs. John Reece of Morganton, a social and refreshment hour was enjoyed by members present. Lovely table prizes were given to high scorers in games played. The ladies then joined their husbands for a social hour and dinner.

My contacts with members of this district have been many more than in my previous two years, therefore making this one more enjoyable and I believe more beneficial. Last April I had the opportunity to install the Burke County Auxiliary Officers and am happy to say I will do so again at their meeting next month. After our May meeting last year, I gave a report to the Catawba County Auxiliary, taking in all the highlights of the Convention. I also gave this report to my own Caldwell County Auxiliary.

I feel my years as councilor has widened my knowledge of auxiliary work besides making numerous lasting friendships. I have enjoyed my contacts and feel a great satisfaction in what I have been able to do in carrying on the work of this great organization. Each member, in sharing the responsibility, has made such a success of the aims set up by the American Medical Auxiliary.

Mrs. Charles M. Kendrick
Councilor, Ninth District

REPORT OF TENTH MEDICAL DISTRICT

The major accent for 1955-56 in the work of the Tenth District has been two-fold: The AMEF Fund, and Nurses Recruitment. Benefit bridge parties were given to raise funds. In Haywood a Nurses Enlistment campaign was carried out, while Buncombe established a Nurses Loan Fund, designed to be self-perpetuating with a final goal of \$1,000; so far \$300 is available for student nurses of the area, part of which is already borrowed and part applied for.

The usual Stevens Bed visits were made regularly, with card and gift showers at Thanksgiving and Christmas time. Picnics and Christmas dinners were given in Henderson and Buncombe. Buncombe in the fall and Haywood in the spring played hostess to the doctors' host group on the occasion of the District meetings in Asheville and Waynesville. Doctor's Day was observed with newspaper publicity and with flowers in hospitals and buttonholes.

The Tenth District is strongly convinced that one of the prime contributions made by its units year by year is the cumulative goodwill created in the various communities by the active unaloof participation of all the doctors' wives in the civic and religious affairs of their towns. By working in specific drives like Red Cross, Cancer, United Fund, Civil Defense, etc.; by carrying their share of the load in such local projects as the Waynesville "Clothes Closet" for needy school children; by providing leadership (including numerous presidents) in the Junior League, AAUW, Music Club, Federated Women's Clubs, etc.; in Asheville, not to mention one Asheville doctor's wife who is presently serving brilliantly on the City School Board for a four year term; by generous and dedicated work as circle and devotional leaders in the various churches; in all these extra-Auxiliary positions, members of the Medical Auxiliary are helping to build right human relations in a way that is bound to result in good public relations for the

medical profession. Should the importance of such activities be underrated? We think not!

Mrs. Curtis Crump
Councilor, Tenth District

REPORT OF AMERICAN MEDICAL EDUCATION FOUNDATION FUND

It is with pleasure that I submit the 1955-56 annual report for your consideration.

To date contributions to the Foundation amount to \$1,039.80 which represents thirty-six county Auxiliaries and one district (Fourth) with six counties that contributed last year yet to report. Eleven counties have increased their contributions over last year and only two counties have decreased their amount. Thirteen counties duplicated their 1955 contribution and eight counties made their initial contribution. Five individual gifts have been earmarked for Universities or memorials. From all indications, this year will show a gain over 1955, but I will have to wait until the Pinehurst meeting to submit a final total.

One county donated to AMEF in observance of Doctor's Day and I have been notified by others that expect to do the same.

Miss Margaret Egan, Director of Women's Activities for AMEF in Chicago, will address Buncombe and Gaston Counties in March.

During Medical Education Week (April 22-28), the National Fund for Medical Education will direct its first appeal to the American public through the "80 Dimes Campaign." The Woman's Auxiliary to the A. M. A. has recommended that we assist in this campaign; consequently, all money collected by Auxiliary members in the "80 Dimes Campaign" will be processed by the AMEF and recognition will be given to each State through AMEF at the American Medical Association convention in June.

My sincere thanks to the many county AMEF chairmen and county presidents for their constant efforts to make this project a success.

Mrs. Shirley S. Littlejohn
Chairman

REPORT OF AUXILIARY NEWS

The Auxiliary News Editor has had two goals in addition to the usual one of editing the News. First, we have tried to bring up to date the mailing list. This has been an enormous job and could not have been properly accomplished without the help of your Treasurer, Helen Hitch, and the Public Relations Office of the Hospital Savings Association. An accurate card file has finally been established and the job of keeping the mailing list an accurate one should be a simple one from now on.

Second, we have tried steadily to increase the number of names and counties contributing to, and appearing in, the News. Ideally, each Auxiliary and each District should be reported on at least once during the four issues that are published in a year. During the year of 1954-55, a total of 25 different county auxiliaries sent in news reports, while five different districts were reported. At the time that this report is being written only 3 of the 4 issues of 1955-56 have come out. So far, 16 different counties have been in the News, and 3 different district meetings have been reported. Assuming that the Spring issue will have at least as many reporters this year as last, there can be a slight increase in our news and name coverage over the preceding year. But it isn't enough. The Auxiliary News should be hearing from 50 Auxiliaries and 10 districts, if it is going to be representative of the organization and fulfill its purpose. Each Auxiliary does many things during the year that are of interest to other auxiliaries. At least one of these activities should be reported for the News. You County Presidents will find it interesting to note

how many times your own county or district has been in the News.

While the mailing list and achieving a true state coverage of Auxiliary activities have been problems, editing your Auxiliary News has been a pleasant and enlightening job. Your issues have come out on their usual schedule: July 15, October 15, and April 15. The cost for editing and mailing the Auxiliary News in 1955-56 was:

Summer issue	\$35.73
Fall issue	30.06
Winter issue	32.07
Spring issue. (estimate)	40.00
Cuts	22.66
Telephone Calls, Chapel Hill	1.97
Postage71
Gasoline to Chapel Hill	4.43
Mailing Permit	10.00
TOTAL	\$177.63

I owe many thanks to our president, our officers, our conciliors, and to many faithful and delightful correspondents. All of us owe many thanks to the Hospital Saving Association in Chapel Hill for their constant and practical help and advice in printing our paper. May I urge that you all take every opportunity to thank them for what they do for us? Perhaps a resolution of thanks from the Auxiliary to the Hospital Saving Association is in order.

Mrs. George W. Paschal, Jr.
Chairman

REPORT OF THE BULLETIN

Beaufort County Medical Auxiliary reports 100% Bulletin subscribers for the second year. It is hoped in the future more auxiliaries will follow their splendid example. Several counties report an increase in subscriptions over last year and the response of reports from the counties has been better.

Letters were written to our state President, County Presidents, and County Bulletin Chairmen urging their support in stressing the importance of each member subscribing to the Bulletin.

To date North Carolina has 115 subscribers which is an increase over last year.

Mrs. James F. Reinhardt
Chairman

REPORT ON CIVIL DEFENSE

Although the reports from all auxiliaries are not complete to date, we have evidence of sixteen auxiliaries which have taken the actual step of devoting the program to Civil Defense. The majority of these programs have emphasized the informative aspects of Civil Defense in an attempt to learn what is being done in general and also specifically in the localities. Local Civil Defense Chairmen and other guest speakers have been utilized. Almost all active auxiliaries have had some contact with their local authorities on Civil Defense and have offered auxiliary cooperation. Auxiliaries have had representation at local defense meetings. It is hoped that we will be having greater auxiliary participation in this vital program.

On May 9-10 the Auxiliary will be represented at the concurrent meetings of the Conference of N. C. Women Leaders and the Conference of Women Leaders from South Atlantic States, Puerto Rico and the Canal Zone to be held in Charlotte at the Charlotte Hotel. The primary purpose is to give women leaders the latest and best civil defense information by top-ranking specialists in the field. There will be a presentation of facts pertaining to threats to national survival; recent developments which have caused policy changes in Civil Defense; what the changes are; how they affect the

family, schools, church and community; and the precautions prescribed by our government to meet the problems involved. Auxiliary members are not only invited but should be encouraged to attend part or all of these meetings.

Mrs. Harry Summerlin
Chairman
(By Mrs. W. T. Brown)

REPORT OF NORTH CAROLINA FAMILY LIFE COUNCIL

I attended the Eighth Annual Family Life Conference on Nov. 13, 14, and 15 at Durham N. C.

The meeting began Sunday evening with sermons given by local ministers in their churches on the general subject of the Church and the Home. Reports of these meetings were given afterwards at the opening meeting at 9:15 P. M.

As this was a working conference many means of teaching were used: sermons, demonstrations, discussions, film presentations, evaluation of materials, and presentation of allied activities.

At the business session of official delegates it was voted to go on record as supporting the establishment of receiving homes by districts for children awaiting court action.

The council welcomes any who wish to attend in addition to the official delegates so if any of the local Medical Auxiliaries would like to have some of its members attend they would be most welcome. Mrs. Ethel Nash of Bowling Creek Road, Chapel Hill, N. C. is the president for this next year and would be glad to send information. The place of next fall's conference is Charlotte, N. C.

Mrs. J. D. Stratton
Chairman

REPORT OF THE HISTORIAN

During the past year the Auxiliary has continued to grow and expand with the addition of many new members (91 to date, Jan. 25th.) and the undertaking of many new projects, especially in all phases of civic work. Members participated in and actively supported civic drives such as Community Chest, Polio, Heart, Cancer, Red Cross, T. B., Scouts, Y. W. C. A., Diabetic Survey Stations, Flood Relief, Blood Typing, etc.

Programs of the monthly meetings have been varied and most interesting, with Mental Health a leading topic. Several forums and symposiums were sponsored by the county units.

Generous contributions were made to the American Medical Education Fund, Student Loan Fund and the Yoder Bed Endowment Fund. Occupants of all four Sanatoria beds were remembered with gifts and visits.

The most historically significant accomplishment during the year was in the field of nurse recruitment. Many counties sponsor one or more nurse scholarships, nurse funds and the formation of a Future Nurses Club.

Many of the county auxiliaries have established libraries in their local hospitals in honor of the doctors. Members are also working in many hospital coffee shops.

Several units are publishing their own newsletters and giving added publicity to their meetings and projects, with increasing emphasis on better public relations.

Many counties are stressing increased subscriptions to the "Bulletin" and "Today's Health."

Plans are going forward for the annual observance of Doctor's Day this year. Flowers will be presented, parties given and publicity of the event will be given through newspapers and radio.

Mrs. Herbert Hadley
Chairman

REPORT OF LEGISLATION

As legislative chairman for the N. C. Medical Auxiliary, I would like to submit the following report as sent to me by the following county Auxiliaries.

The Forsyth County Auxiliary presents to their Auxiliary membership a monthly report on legislation through their newsletter. Even without meetings, new information was brought to each member in this way, throughout the entire year. About twenty doctors' wives attended a meeting of the Forsyth County Medical Society called by the President on January 3rd to discuss medical legislation to be considered by Congress when it reconvened in January. Dr. J. P. Rousseau, State President, spoke to Forsyth County Auxiliary on February 4th, 1956, on the subject, "The Role of the Woman's Auxiliary in Public Relations and Medical Legislation", urging each doctor's wife to write her senators expressing her views of the pending medical legislation.

Mecklenburg County Auxiliary urged all members to write or wire their Congressmen in respect to H. R. 7225. Other legislative bills were studied during the year. Dr. David G. Welton, member of the State Medical Society Board, gave an interesting program on legislation to the Auxiliary.

Chowan-Perquimans County studied H. R. 7225 as a meeting program and wired and wrote their Senior Senators advising their opposition to the bill.

Gaston and Person Counties reported very interesting and informative programs on pending legislation during the year.

Johnston and Pitt Counties sent letters and telegrams to Senators opposing H. R. 7225.

Watauga-Ashe County took action as requested through letters, wires, and cards to our Senators.

Durham-Orange County had legislative explanations and reports given at their fall meeting. In January each member was requested to express their opinion by letter or wire to their Senators on H. R. 7225.

At the beginning of the year (September), I mailed to each County Chairman a brief summary explaining each bill we were asked to study during the year. When H. R. 7225 became of national interest as far as the Medical Society was concerned, I went to the call meeting of the State Society in Raleigh and learned from men on the national level "what" and "why" we should be alarmed.

In the fall the 4th district planned a meeting on legislation. They invited me to be their guest speaker. I talked to them on current legislation and brought to them H. R. 7225 along with other bills which we were asked to study. Each county in this 4th district took a prepared typewritten sheet explaining these bills which I furnished them and gave them in their local County Auxiliaries as part of programs or reports.

When Mrs. Leo Smith, the Southern Regional Chairman, asked for our State participation in the fight against H. R. 7225, I immediately wrote a form letter and sent to each county legislation chairman and councilor in our state asking them to express their opinion on this highly important matter by writing or wiring their Senators.

Mrs. Lewis McKee
Chairman

Note: Alamance, Caswell, and Wayne County discussed bills at February meeting. Senators were contacted concerning H. R. 7225.

REPORT OF NORTH CAROLINA
WOMAN'S COUNCIL

The N. C. Council of Women, which was organiz-

ed in 1952, of which the Medical Auxiliary is a charter member, was held in Lenoir Hall, in the form of a Dinner Meeting, July 20, 1955. Mrs. Guy B. Johnson, Chairman, opened the meeting, at which time a resume was given on the activities of the Leadership Training Workshop and its success. Certificates were awarded each member who had enrolled and completed the Leadership Training Workshop.

On November 10, 1955, the Executive Committee of North Carolina Council of Women's Organizations met at Luncheon in Lenoir Hall. Mrs. Guy B. Johnson, president, presided. It was recommended that the Executive Committee find a solution to the financial support of such an organization. It was hoped that by private donations, or by each organization being charged a fee of membership, that the problem be solved. It was moved and seconded that this matter be discussed further at the February meeting. Also, discussion of amendments to the Constitution were carried over to the February meeting at which time they were accepted.

At the February 10, 1956 meeting which met in Abernathy Hall, presided over by Mrs. Charles Graham, second vice-president, it was decided to hold the Workshop for 1956 from July 23-26, subject to obtaining the necessary staffs. If this should prove inconvenient, this could be held July 16-19. It was suggested that a fee of twenty-five dollars be charged each organization for membership in the Council. It would be applied to cover registration fee for not more than five delegates from one organization to the Workshop. There would be no refund if an organization should send fewer than five delegates. In case an organization does not see fit to pay the \$25.00, the council could expect a \$5.00 registration fee from each delegate to the Workshop. This met with favor. Plans for the Workshop were discussed and depending on availability of staff, two out of the following four topics would be selected, lasting one hour daily: (a) Public Speaking, (b) Citizenship, (c) Community Development, (d) Techniques of Leadership. Also general meetings would deal with local problems, and Community Development, with emphasis on Coordination between various community groups and community resources. Miss Emily Persons agreed to serve as Workshop Chairman upon the resignation of Mrs. Charles Graham. The chairman urged that each organization represented inform its membership at the earliest possible time of the Workshop. It was announced that a preliminary program would soon be sent to all organizations together with a leadership training suggestion sheet. The North Carolina Medical Auxiliary received commendation for its representation having edited the Directory of 1954-55. The Vice-president of the N. C. Council will hereafter be responsible for the Directory. Mrs. Kenneth Brinkhous and Mrs. C. T. Wilkinson were representatives of the Medical Auxiliary for the February 9 meeting in the absence of the appointed representative.

Mrs. E. M. Robertson
Representative

REPORT OF MENTAL HEALTH COMMITTEE

The program of the Mental Health Committee shows gradual expansion. Greatest activity appears to be concentrated in communities fortunate enough to have mental health resources such as hospitals and clinics.

Twenty county auxiliaries have appointed mental health chairmen of which 12 have submitted reports to date. Four auxiliaries have written that chairmen were not appointed either because the members were too widely scattered or the auxiliary

too small. One auxiliary without a chairman has a long established relationship with well organized community mental health activities. Auxiliary members are kept informed of the needs and activities by their conferees who work directly with these groups, and they serve as a unit when called upon to do so.

All auxiliaries reporting have given service and promoted public education. Many auxiliary members serve on boards of directors, are members of the county and/or state mental health associations, or give direct service to mental health clinics or hospitals.

By May, 9 auxiliaries will have had speakers, 7 auxiliaries will have helped local or state mental health associations with membership drives (3) participated in conferences or institutes (4), assisted in organization of county mental health associations (2).

To date, 7 auxiliaries plan Mental Health Week activities in cooperation with other organizations (3); by use of press and/or radio (2); by a poster display (1); by having a speaker at auxiliary meeting (4); by presentation of the play "Scattered Showers" to auxiliary members, to the Council of Church Women, to the PTA and over the radio (1).

Three auxiliaries have furnished speakers to other organizations. Films have been used by 3 auxiliaries, radio and TV by 4, newspapers by 3, pamphlets distributed by 2. Direct financial assistance to local agencies has been given by at least 3 auxiliaries, at least 6 have served in some way to coordinate local programs and 2 have sent communications to legislators.

Some of the subjects covered were Alcoholism, Mental Health Problems, Better Understanding of Mental Health Problems, Projects of the Mental Health Association, Promoting Mental Health, Industrial Mental Health, Therapeutic Recreation for Youth, Why Our Interest in Mental Health? and Young Marrieds.

Mrs. James B. Lounsbury
Chairman

REPORT OF NURSE RECRUITMENT

Twenty-three auxiliaries report the following activities:

Five contributed to the Eighth District Scholarship.

One contributed to the Seventh District Scholarship.

Ten have county scholarship or loan funds. One sponsors a scholarship for practical nurses. Fifteen participated in Career Day in the high schools in their counties and cities. Two reported excellent work with Future Nurses Clubs. One gave 20 YW-CA memberships to the Student Nurses, also \$24.00 for magazine subscriptions for the Nurses Home use. They assisted in selecting a girl for Altrusa Scholarship and obtained 5 other scholarships from civic clubs. They served as hostess and furnished flowers for the Annual Tea for Junior and Senior High School students interested in nursing as a career.

One Auxiliary showered their scholarship winner for 1955 with birthday cards and gifts, issued application blanks and posters for the bulletin boards to Guidance Councilors in 23 high schools, entertained the Councilors and girls interested in nursing from these schools. This same auxiliary has a scholarship and loan fund available to students and nurses interested in Post-graduate study; no interest is charged on such a loan. A film was shown in 9 high schools. This auxiliary combines two counties. From their report, it would seem that they have done an excellent job.

One auxiliary displayed a window in a local department store on Nurse Recruitment, also placed pamphlets, posters and literature on Nursing in the City Library.

One auxiliary gave members of the graduating class cuff links, and gave a tea and tour of the hospital for Senior High School students interested in Nursing as a career.

One auxiliary sponsors a four-year scholarship which is donated by a local person interested in the training of nurses.

Several auxiliaries have had publicity in local papers and several members gave talks in high schools on Nursing as a career for young women.

There were a few other auxiliaries which had programs on Nurse Recruitment.

The efforts above speak for themselves. Some good work has been done, but next year we must work harder, hoping, too, that many more auxiliaries which haven't reported this year will do so this coming year.

Mrs. Almon R. Cross
Chairman

REPORT OF PROGRAM COMMITTEE

Theme: "Active Leadership in Community Health".

In September your chairman sent to the President sixty-five copies of the Program Outline prepared by the Program Committee of the National Auxiliary along with a personal letter for each County Program Chairman. These were placed in the County President's packets given out at the Fall Board meeting in Chapel Hill. I am very glad to say I was able to attend this excellent Board meeting and summarize the program for this year.

Forty county auxiliaries have reported on their programs for the year through the report form sent out by the President, Mrs. Croom, and cards sent by myself. A list of these according to topic and number of auxiliaries follows:

Community Service	15	auxiliaries
Civil Defense	15	"
Legislation	17	"
Public Relations	7	"
Nurse Recruitment	9	"
American Medical Education		
Foundation	10	"
Mental Health	13	"
Rural Health	7	"
Safety	5	"

Many auxiliaries reported special projects in their local communities such as work with Orthopedic Clinics, Mental Health Clinics, etc. Forsyth-Stokes originated this year a newsheet mailed to each member with a resume of the meetings and reports from major committees. This excellent undertaking by the Program Committee enabled members not present to know what had been done and also eliminated a lot of reports at meetings.

In February your Chairman was asked by the National Program Chairman to conduct a survey of the doctors of the state to find out how much they contribute to their communities in free time and services. This survey is being made of the medical profession all over the United States.

Thank you all very much for your cooperation.

Dorothy S. King
Chairman

REPORT OF PUBLIC RELATIONS COMMITTEE

I am pleased to submit the following report as Chairman of the Public Relations Committee for the Auxiliary to the Medical Society of the State of North Carolina:

Questionnaires were sent to all county societies in the form of the following four questions. (Answers received follow the questions.)

1. State briefly in what manner you advanced good Public Relations? Talks to public on Rural and Mental Health; gave program on X-ray; had health exhibits; had health education program; public relations movie shown (by 3 counties); gave clothing to flood relief; gave "Today's Health" to Public Library; program for Retarded Children; helped in Crippled Children's Clinic; gave transportation and refreshments for Golden Age Club; worked in the Toy Shop at Christmas; worked on the Arts Council.

2. Did you have a program on Public Relations? Twenty counties reported Yes; 6 counties reported No.

3. Did you work with existing health organizations? Eighteen counties reported Yes; two reported No; helped with T. B. seals; helped with blood typing; made dressings for cancer clinics; 3 counties helped with Salk vaccine; helped with T. B. tests in schools; helped with Mental Service League.

4. Did you initiate an original plan? Three counties reported Yes; collected clothes for flood relief in Massachusetts; 3 capping awards to student nurses; sponsored A. M. A. Health Exhibit at Nature Museum.

I attended the following meetings in behalf of the Public Relations Committee: State Board Meeting in Chapel Hill in September; a meeting of Forsyth County Medical Society for discussion of pending legislation HR 7225 in January; Public Relations Forum sponsored by the Senior Class of Bowman Gray School of Medicine in February.

I am looking forward to attending the State Public Relations Conference with Dr. Martin, past president of A. M. A., as guest speaker in Winston-Salem on February 23rd.

I secured from the A. M. A. office in Chicago materials that would help the Public Relations programs. This material was sent to the county chairmen for the asking.

It has been my pleasure to serve you as Public Relations Chairman.

Mrs. George Holmes
Chairman

REPORT OF RADIO AND MOVIES COMMITTEE COUNTIES:

Mecklenburg

1. Originated both radio and T. V. shows on Nurse Recruitment.
2. Movies—"Girls in White" and "The Lamp."

Chowan-Perquimans

1. Radio program to explain Doctor's Day.
2. Film on Mental Health.

Rockingham

1. Movie—"Self-Examination for Cancer of the Breast."
2. Film concerning the work of the N. C. Children's Home.

Watauga-Ashe

1. Radio program on Nurse Recruitment and Nursing Education during Career Week.
2. Radio program for Doctor's Day.
3. Film on Nursing and Laboratory Techniques.

Lee

Reported not active.

Wake

1. Radio interview planned for Mental Health Week.

Catawba

1. Radio program in February.

Gaston and Durham-Orange

1. Made A. M. A. films available to various civic organizations.

Robeson

1. Radio and movies to be used in regard to

Public Heart Forum, March 14th.

Rowan-Davie

1. Radio to be used in connection with Doctor's Day.

Norma R. Romm
Chairman

REPORT OF RESEARCH COMMITTEE

Copies of "Program of Research, 1955-1956" distributed in President's Package at fall meeting in Chapel Hill.

In January, 1956, cards were sent out advising county presidents or research chairmen that their reports were due.

Five counties sent reports.

The Catawba County Medical Auxiliary research chairman reported the following:

1. Buying and placing three books on subjects pertaining to medicine in the public library.
2. Paper written on "The Foundation of the Exceptional School for Children of Catawba County" by Mrs. L. L. Coleman, Jr., Research Chairman.

The Guilford County Medical Auxiliary reported:

1. Dr. S. F. Ravenel, Greensboro pediatrician, was invited to make a talk before the American Medical Association on "Progress in Humidification."
2. Outline of the planned Educational Forums on Health.

Durham-Orange Medical Auxiliary research chairman sent in a complete account of the newly-organized "United Fund Better Health Foundation, Inc.", with its three-way program on research education, and service.

Also a clipping of Dr. Charles Horton of Duke Hospital being awarded the American Society of Plastic and Reconstructive Surgery first prize for research work.

Rowan-Davie reported honors bestowed upon two doctors. Dr. Donald Lomax was named chairman of program services of United Palsy of N. C. for the coming year, and Dr. Wayne Cline awarded Traveling Fellowship by the Southeast section of the American Urological Association.

The Forsyth-Stokes Medical Auxiliary sent in accounts of the following:

1. New Health Center Building of Stokes County.
2. Child Guidance Clinic of Forsyth County.
3. Community Health Programs, to be held monthly.
4. Sigma Xi club established at Bowman Gray School of Medicine of Wake Forest College, with eleven charter members.
5. Forsyth Health Society, Inc., organized Jan., 1956
6. Newspaper clippings of several Winston-Salem doctors receiving grants of money for continuing their work. Among them were: Drs. Harold D. Green and Adam B. Denison for the study of blood flow to the brain; and Dr. Richard Masland, to spend a year studying Child Mental Retardation.

Short biographies of the following doctors were sent to the research chairman of the Southern Medical Association:

Dr. J. P. Rousseau, Winston-Salem, North Carolina
Dr. W. H. Davis, Jr., Winston-Salem, North Carolina
Dr. Robert L. Means, Winston-Salem, North Carolina

Newspaper clippings reporting the following honors bestowed upon, and outstanding accomplishments of, North Carolina doctors were included in

material sent to the research chairman of the Southern Medical Association:

1. Dr. Merrill Spencer and Dr. Harry M. Carpenter of Winston-Salem invited to present papers in Fribourg, Switzerland, at an international meet of specialists on the circulatory system.
2. Dr. Richard K. Young, director of Pastoral Care at the Baptist Hospital, Winston-Salem, has written a book on "The Pastor's Hospital Ministry."

Mrs. B. L. Field
Chairman

REPORT OF REVISIONS

The work on the complete revision of the By-Laws of the Woman's Auxiliary to the Medical Society of the State of North Carolina, which was started during the year 1954-1955 has been continued. The work this year was mainly aimed at further simplification and clarification of the By-Laws, with special emphasis on Article VIII, dealing with the financial structure of the Auxiliary. Changes were also recommended in Article XIV dealing with Standing Committees and Article XVI dealing with Amendments. A special meeting was called during August, and it was held at the home of the Treasurer in Raleigh. Present at the meeting with the Treasurer and the Chairman of the Revisions Committee were the President and the First Vice-President.

A copy of the Revisions will be sent to the Auxiliary News for publication in the April issue. These will outline the changes as agreed upon. After final approval the Revised By-Laws will be mimeographed for distribution.

Mrs. Robert L. Garrard
Chairman

REPORT ON RURAL HEALTH

Our 8th Annual State Rural Health Conference held at the Hotel Sir Walter in Raleigh on October 6, 1955 started our year off with much zeal and determination to do a good job in promoting our rural health program. The attendance at this meeting was very encouraging. The two topics for discussion were farm and home accidents and mental health. The conference theme, "It's Up To You" had a personal impact as to our individual and collective responsibilities in studying our local accident and mental health problems.

Our medical auxiliaries have shown their interest in the rural health program this year in various ways. We had 7 out of 10 districts reporting on their rural health programs this year. Of these, the Fourth and Sixth Districts had the greatest number of reports. However, many of the auxiliaries made fine reports which showed interest in the rural health program. Some helped with the T. B. mobile x-ray units, blood bank units, various public health programs, co-sponsored Beginners' Day Examinations with Parent-Teacher Associations, assisted with the polio vaccination program, offered aid to hospitals and clinics, sent Today's Health to public schools, and conducted diabetes surveys.

The Eastern Regional Rural Health Conference will be held in Clinton on March 1, 1956. The day-long program will highlight Farm and Home Accidents, Hospital Insurance, and a special report on the Beaufort County Health Survey.

The Western Regional Rural Health Conference is scheduled for March 14, 1956 in Hickory with a program similar to that planned for the Clinton Conference.

Your Chairman plans to contact each auxiliary personally about these forthcoming conferences and to visit those auxiliaries which have requested a meeting with the Chairman.

May our medical auxiliaries continue their good work and interest in promoting Rural Health!

Mrs. E. T. Beddingfield, Jr.
Chairman

REPORT ON SCRAPBOOK

At the meeting of the Executive Board in September, 1955, a written request was made that each county scrapbook or publicity chairman collect newspaper clippings from their local newspapers throughout the year and send to the State Scrapbook Chairman.

In March, 1956, a reminder was sent to each Chairman to have all clippings in by April 15, 1956.

The Scrapbook will be compiled and displayed at the Annual Meeting at Pinchurst in May, 1956.

Margaret G. Parsons
Chairman

REPORT ON STUDENT LOAN FUND

As Chairman of the Student Loan Fund it is a pleasure to present this report.

This has truly been a profitable year as measured by the motto, "Service to Others". The Medical Auxiliary to the Medical Society of the State of North Carolina has made possible three loans. One each to three students in North Carolina through the Student Loan Fund. They are as follows:

Miss Mary Lide, Senior, Bowman Gray School of Medicine, Winston-Salem, Five Hundred (500) Dollars.

Mr. Jerome Schacter, Senior, Duke University School of Medicine, Durham, Five Hundred (500) Dollars.

Mr. William Purcell, Senior, University of North Carolina School of Medicine, Chapel Hill, Two Hundred Twenty Five (225) Dollars.

Contributions at this date make a total of Sixty-five (65) dollars for the current year, but we hope much more will be received before the end of the year. This is one of our most important projects and we hope for your continued and generous support.

The Status of the Student Loan Fund as of today, Feb. 3, 1956, is:

Balance—June 30, 1955	\$2,360.32	
Plus: Savings Account Interest \$ 21.04		
Interest on "K" Bonds 13.80		
	\$ 34.84	34.84
		<hr/> \$2,395.16

Less: Loans to Students	\$1,225.00	
Intangible N. C. Bank Tax 2.17		
	\$1,227.17	1,227.17
		<hr/> \$1,167.99

Plus Contributions:		
Burke County	\$ 15.00	
Harnett County	5.00	
Richmond County	10.00	
Chowan-Perquimans	5.00	
Wake County	20.00	
Columbus County	10.00	
	\$ 65.00	65.00
		<hr/> \$1,232.99

Treasurer reports balance Feb. 11, 1956	\$1,438.99
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It has been a wonderful year and I thank each one of you for your interest and support.

Mrs. Roscoe D. McMillan
Chairman

REPORT ON TODAY'S HEALTH

Reports have been received by twenty-seven of fifty counties in North Carolina. A total of three hundred and seventy-five subscriptions have been sold. Two hundred and ninety-six were to doctors and seventy-nine to the lay public.

This report is approximate as many subscriptions have been renewed directly through the Today's Health office in Chicago.

A list of County Chairmen has been mailed to the publishing office in Chicago and another to the Southern Region Chairman, Mrs. S. Lamar Bailey, Kosciusko, Mississippi.

Mrs. C. K. Lynn
Chairman

REPORT OF THE COUNCILOR TO THE SOUTHERN MEDICAL ASSOCIATION

A report of the action which our own Auxiliary took regarding a recommendation about the Jane Todd Crawford Memorial Fund was sent along with reports to the proper officers.

I regret that I was unable to attend the Annual Meeting which was held in Houston, Texas November 14-17, 1955. We were represented by Mrs. Harvey May, Charlotte. Mrs. May will become our new councilor at the expiration of my term.

It has been a pleasure to serve in this capacity. We were especially fortunate to have the S. M. A. President, Mrs. Louis K. Hundley, Pine Bluff, Arkansas, with us at our post-convention breakfast at the Annual Meeting in Pinehurst in May, 1955.

The Golden Anniversary Convention of the Southern Medical Association will be held in Washington, D. C. November 12-15, 1956.

Mrs. Harry L. Johnson
Councilor

REPORT ON COOPER BED

The Cooper Bed Endowment Fund was completed last year.

During the past year, we have had two guests in the Cooper Bed. Miss Margie Lee Renfrow, an attendant at the State Hospital, was our guest from January until her discharge in August. She received gifts of flowers, books, candy, and money from those Auxiliaries assigned according to the Remembrance schedule. She was most appreciative of all the attention shown her by the Auxiliary members.

Our second and present guest is Miss Rita Rivers Moore from Marshallburg, N. C. She is 36 years old, a graduate nurse, who had just completed the work on a Masters at the University of North Carolina when she was hospitalized. She has very early pulmonary tuberculosis and Dr. Easom feels she should make a satisfactory recovery. She is extremely fond of reading. She wears size 34 pajamas and bed jackets. I have suggested monetary gifts as they are always acceptable. She is already receiving magazines and she has received some gifts from those Auxiliaries assigned. Miss Moore is a delightful person—most appreciative—and would enjoy visits from the Auxiliary members.

Those Auxiliaries responsible for making our guest's hospitalization pleasant have been sent schedules assigning each Auxiliary two months during the year to remember our guest. The county presidents have been notified of our present guest with suggestions for gifts.

Marion Spencer
Chairman

REPORT ON STEVENS BED

This has been a most interesting year as your Steven's Bed Chairman. As you recall, Mrs. Lena Ann Cloninger was our guest at the time of our last report. In March she had improved enough to be dismissed and return to her family.

Shortly after Mrs. Cloninger's discharge Mrs. S. M. Banner, a graduate nurse at Mt. Airy, was chosen to be the occupant of the bed. She is married and the mother of two small children, a boy, and a girl. She did not remain our guest long for in July Dr. Malcom Mullen was admitted. He is an Internist at State Hospital in Morganton, married, and has a 13 month baby boy. He made splendid progress and was discharged January 14, 1956, well enough to continue treatment at home.

At the present time, since Dr. Mullen's discharge, we have no guest.

Activities and Auxiliaries participating are as follows:

April—Rockingham County sent Coronet which both guests enjoyed.

May—Visits and flowers—State Chairman.

July—Columbus County—toilet articles.

August—Visit—local chairman.

September—Magazines sent—state chairman.

October—Visit, fruit and cookies—state chairman.

November—Letters from Chairman of Wake County asking for suggestions for Christmas gift for guest. This was answered. Card from Richmond County also asking for suggestions for Christmas gift.

Buncombe County had our regular meeting and tea at the Sanatorium. A shower of gifts including scarf, books, shaving lotions, stamps and money were presented to Dr. Mullen.

December—Several members of the Burke County Auxiliary drove up and brought a lovely basket of fruit, candy with a Christmas card attached in which was a \$50.00 bill and a \$5.00 bill.

Caldwell County sent a pair of pajamas and a shirt.

A letter was received from both Mrs. Banner and Dr. Mullen expressing their thanks and gratitude to all auxiliaries for the privilege of the use of the bed. I am sure if each member had the opportunity to visit a guest she would be rewarded for any time and effort spent, by the deep gratitude each guest has toward the Medical Auxiliary for such help and thoughtfulness.

Mrs. E. C. Clayton
Chairman

REPORT OF MCCAIN BED

Dr. Geddie Monroe of Fayetteville occupied the McCain Bed from February 15, 1954 until August 4, 1955.

Mrs. Rose Ann Thompson, R. N., of Wilmington, was the occupant of the bed from August 4, 1955 until November 19, 1955.

There being no one connected with the Medical Profession in the Sanatorium at this time, the McCain Staff recommended we have Mrs. Betty Jean Hughes as our guest. She has been a patient there since May 30, 1955. Mrs. Hughes is a young mother with two children from Asheboro. She is most appreciative of what the Auxiliary members are doing for her.

The year-round remembrance plan for our guest in the McCain Bed has worked smoothly and all auxiliaries were notified and cooperated according to schedule.

Mrs. Robert Arthur Matheson
Chairman

REPORT OF YODER BED

The first occupant of the Yoder Bed was Mrs. Doris Terry in July, 1955. Mrs. Terry was discharged from the sanatorium in November and is now enjoying an excellent recovery at her home. Mrs. Terry was most appreciative of the help given her by our auxiliary and expressed it in many letters and cards. The present occupant is Miss Elizabeth H. Hendrick of Chapel Hill, N. C., a former Medical Technologist.

Miss Hendrick is equally appreciative as Mrs. Terry and although her recovery does not appear to be as rapid as Mrs. Terry's, she seems to be making good progress.

These patients were remembered each month by one of the county medical auxiliaries. They received thoughtful and beautiful gifts and flowers in addition to a large number of cards. In September each County Yoder Bed Chairman was sent a letter urging their auxiliary to give the Yoder Bed top priority in the second year. At the time of this report, February 27, the funds have gone over those of last year. The auxiliaries have been most generous in their giving, and I congratulate each one and want them to know that I am deeply grateful for their wonderful response.

The balance in the bank February 27, 1956 is \$918.38, and I am sure it will be more by the time of our state convention as the checks are still coming in. Contributions last year were \$502.60. To this was added the sum of \$524.28 being the sum transferred from the Sanatoria Bed Fund in accordance with our by-laws. The total in the Yoder Endowment Fund then being \$1,026.88, our treasurer, Mrs. Hitch, purchased a \$1,000.00 U. S. Saving Bond, Series K. The remaining balance of \$26.88 is included in our present bank balance of \$918.38.

Due to the wonderful generosity of our County Medical Auxiliaries, we hope to reach our endowment goal in the not too distant future.

Mrs. W. L. Kirby
Chairman

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- C—Correspondence
 C&O—Committees and Organizations
 MS—Medical Spectator
 PM—President's Message

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U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

A Board of Scientific Counselors has been established by the Public Health Service to review, discuss, and make recommendations concerning the research conducted by the National Cancer Institute at the National Institutes of Health, Bethesda, Maryland and in the field.

The new six-man group is composed of outstanding non-Federal scientists. Chairman is Dr. Wendell M. Stanley, Nobel prize winner and director of the Virus Laboratory, University of California at Berkeley.

* * *

Appointment to the National Advisory Heart Council of Dr. Michael E. De Bakey, Chairman of the Department of Surgery, Baylor University College of Medicine, has been announced by the Surgeon General, Leroy E. Burney of the Public Health Service, U. S. Department of Health, Education, and Welfare.

Dr. De Bakey, since 1948 the Judson L. Taylor professor of surgery at the University, is also surgeon-in-chief at the Jefferson Davis Hospital, and the Methodist Hospital, Houston. He is an associate editor of the American Surgeon and a co-editor of the American Lectures in Surgery.

* * *

Dr. Joseph L. Melnick, of the Yale University School of Medicine, has been appointed to the staff of the Division of Biologics Standards, National Institutes of Health.

Dr. Melnick will serve as chief of the Division's Laboratory of Viral Products, and of the Virus Research Section, which is engaged in fundamental research in virology related to the safety, purity, and potency of virus vaccines and to the development of future viral products.

* * *

Robert D. Coghill, an organic chemist who formerly was Director of Research of Abbott Laboratories, North Chicago, Illinois, has been appointed Special Assistant for Industrial Research at the Cancer Chemotherapy National Service Center, National Cancer Institute.

In this position Dr. Coghill will be responsible for the industrial aspects of the national program of cancer chemotherapy research.

VETERANS ADMINISTRATION

A tiny electronic meter for measuring blood pressure has opened a new field for understanding heart failure, shock, and other blood circulation disorders, Veterans Administration said today. The meter, about the size of the end of a match

stick, is inserted into a vein and may be gently pushed up and into the chambers of the heart and blood vessels of the lungs. The movement causes no pain or discomfort, and tissues of the veins are not damaged in any way, VA said.

Dr. Herbert O. Sieker, assistant chief of medical service at the VA hospital in Durham, North Carolina, has used the tiny gauge to measure blood pressure in the veins of 10 normal persons and 15 patients with symptoms of heart disease. He said he usually takes from 50 to 100 different readings for each patient.

Although doctors have long been able to measure the pulse of the blood as it is pumped by the heart through the arteries, measurement of pressures involved in return of blood through the veins has been difficult, Dr. Sieker explained.

His work holds promise of helping clarify the forces that return blood to the heart, VA said.

Dr. Sieker, who also is an assistant professor of medicine at Duke University School of Medicine, said the meter was developed by Dr. Otto H. Gauer, a German physiologist who spent several years in the United States.

* * *

Finding of a unique fungus infection that develops in persons with diabetes emphasizes the need for the most careful medical attention for all diabetics. Veterans Administration reported recently. However, not all diabetics are likely to develop the strange fungus disease, VA said.

Research at the VA hospital in Durham, North Carolina, indicates the disease, known as mucormycosis, occurs in persons with "acidosis," one of the complications of diabetes, but not in other diabetics. An intensive search is underway at the hospital for an antibiotic drug to combat the fungus infection.

The researchers are Dr. Roger Baker, chief of laboratory service at the VA hospital and professor of pathology at Duke University School of Medicine, his associates at the hospital, and Dr. Elizabeth Ferrington, assistant chief of laboratory service at the VA center in Jackson, Mississippi.

Since 1943, they have studied nearly 50 cases of mucormycosis.

SCIENCE INFORMATION BUREAU

"Clinical Norms," a compact but comprehensive book useful in medical practice and in professional schools, is being made available by Lakeside Laboratories, Inc. here on request from medical school deans and instructors of clinical nursing.

In its 27 pages, the publication includes hundreds of facts used in evaluations of laboratory tests and clinical diagnoses of various conditions.



